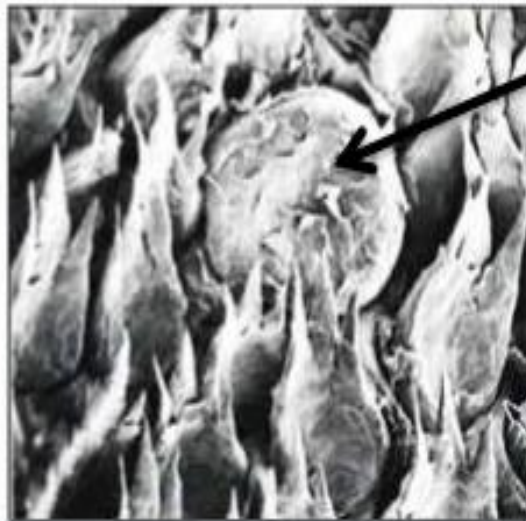
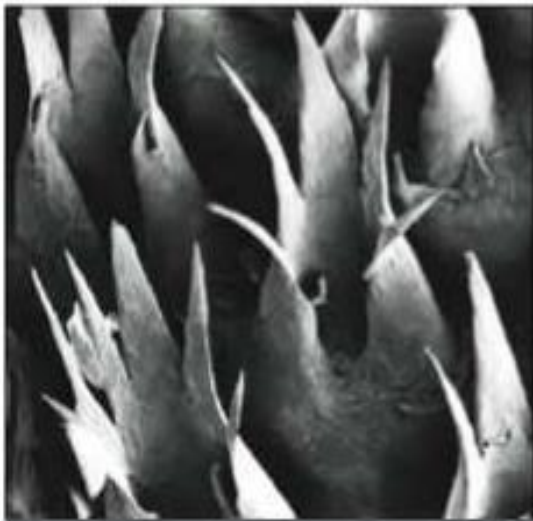
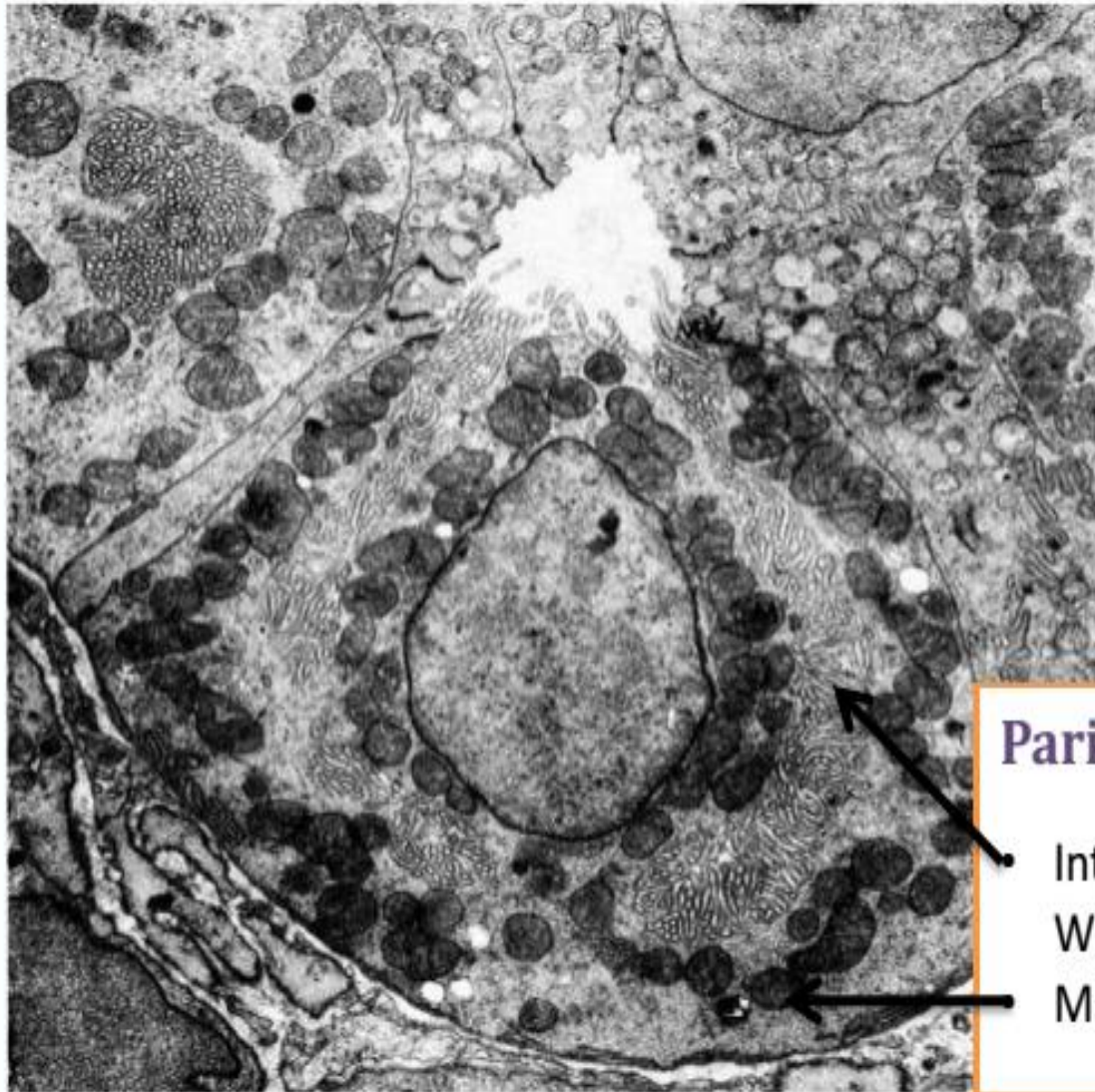
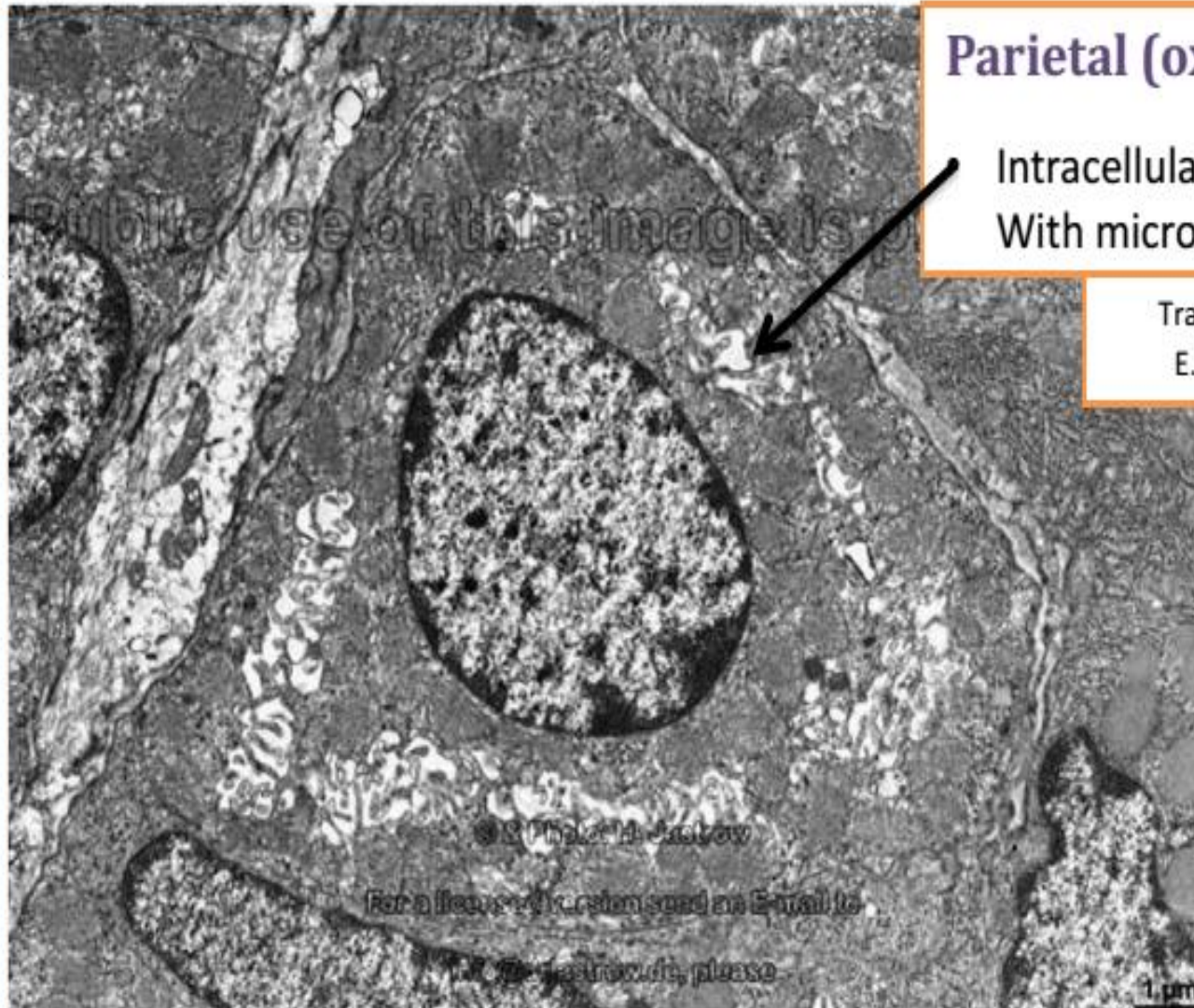
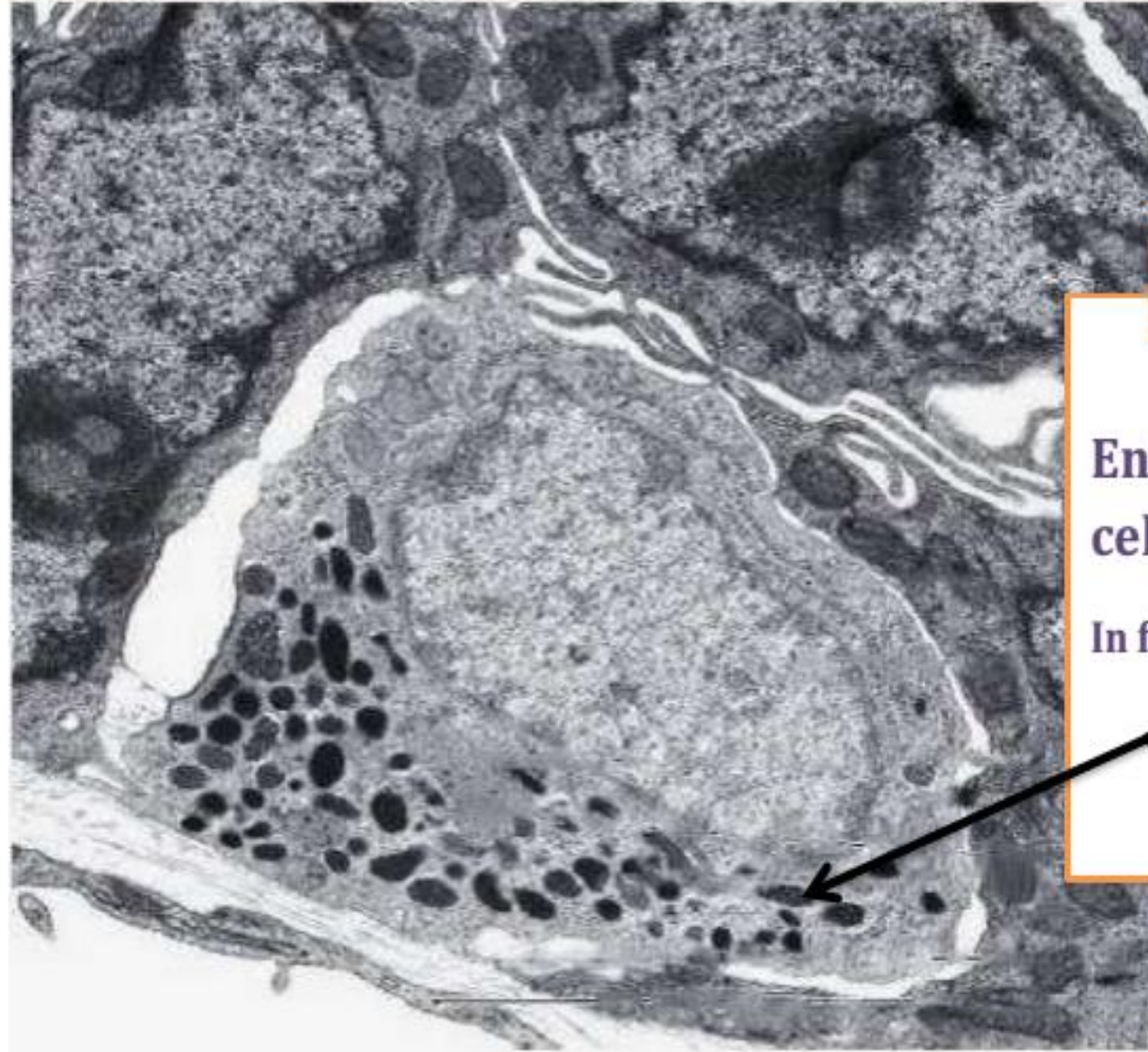
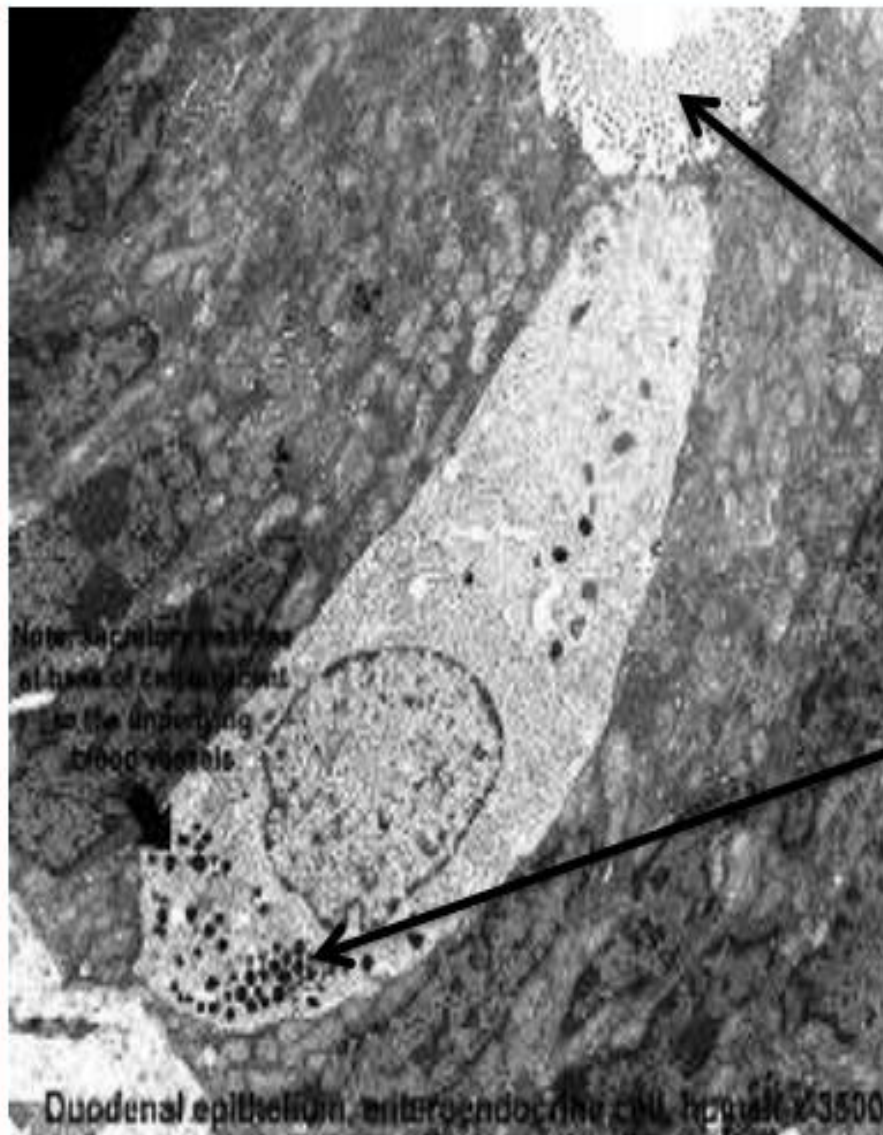
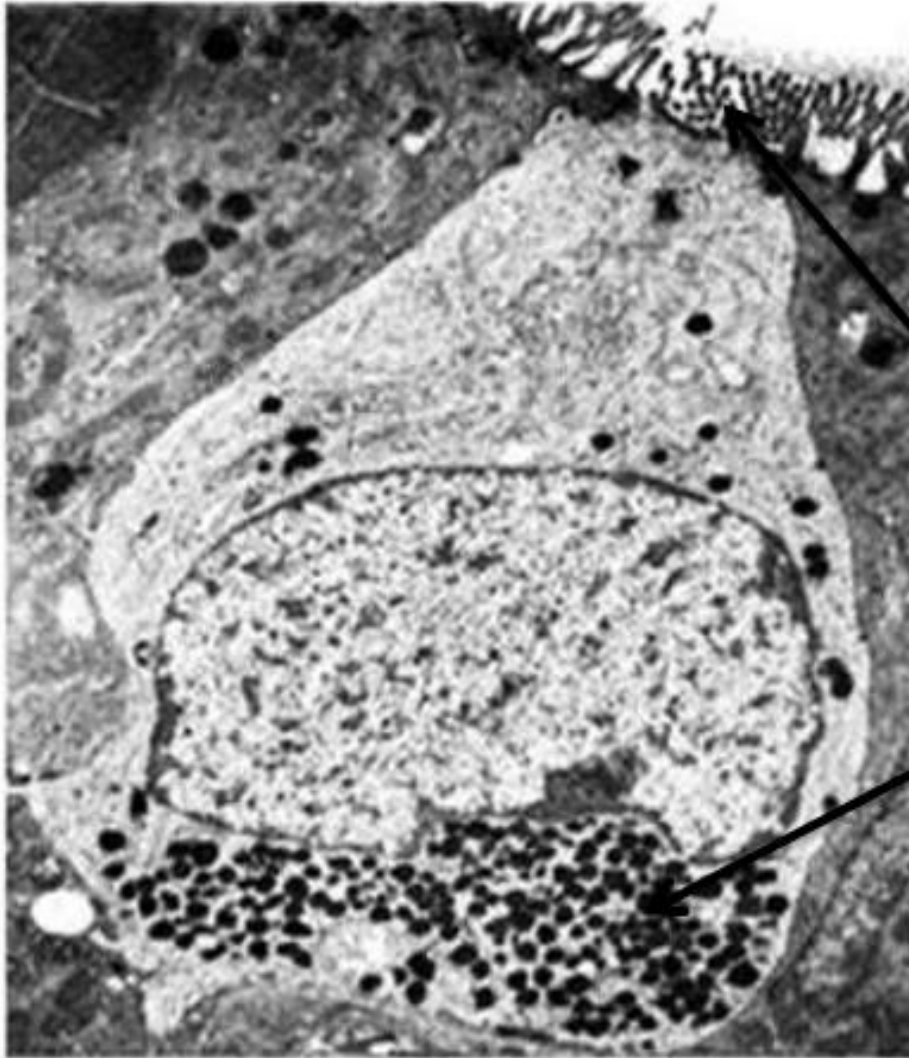
Scanning electron micrograph [SEM] showing:

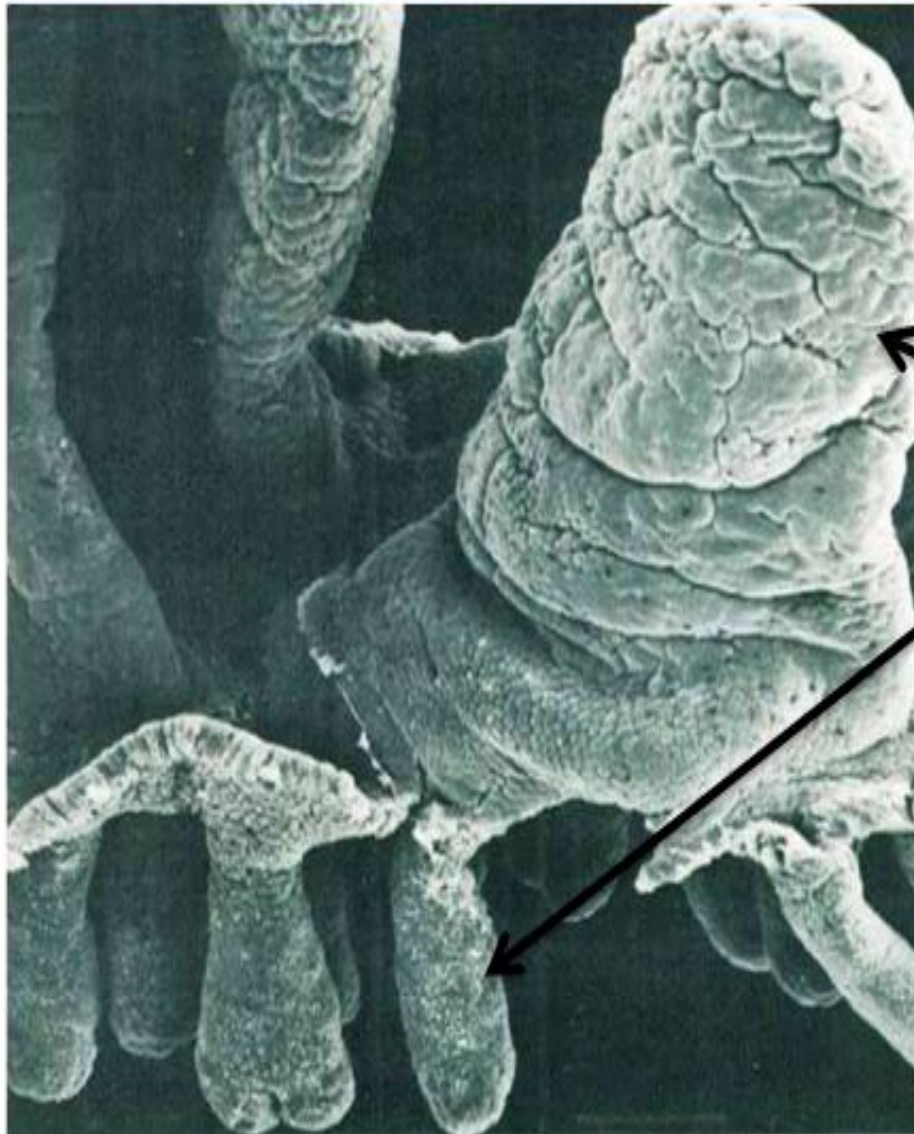
Filiform papilla on tongue

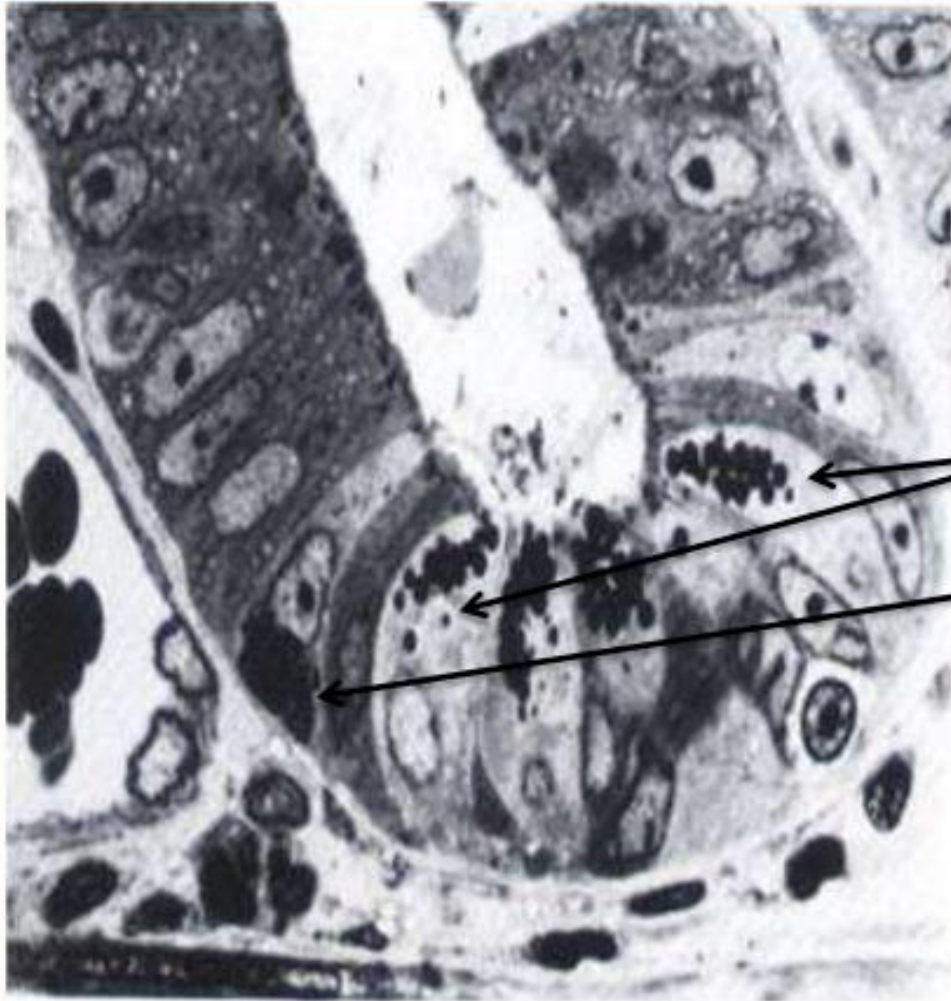
Fungiform palpillae

Transmission
E.M.[TEM]
Parietal (oxyntic) cell
Intracellular canaliculi
With microvilli
Mitochondria (numerous)

Parietal (oxyntic) cell
Intracellular canaliculi
With microvilli
Transmission
E.M.[TEM]
1 µm

Transmission
E.M.[TEM]
Enteroendocrine
cell [closed type]
In fundic gland
Basal electron
dense granules

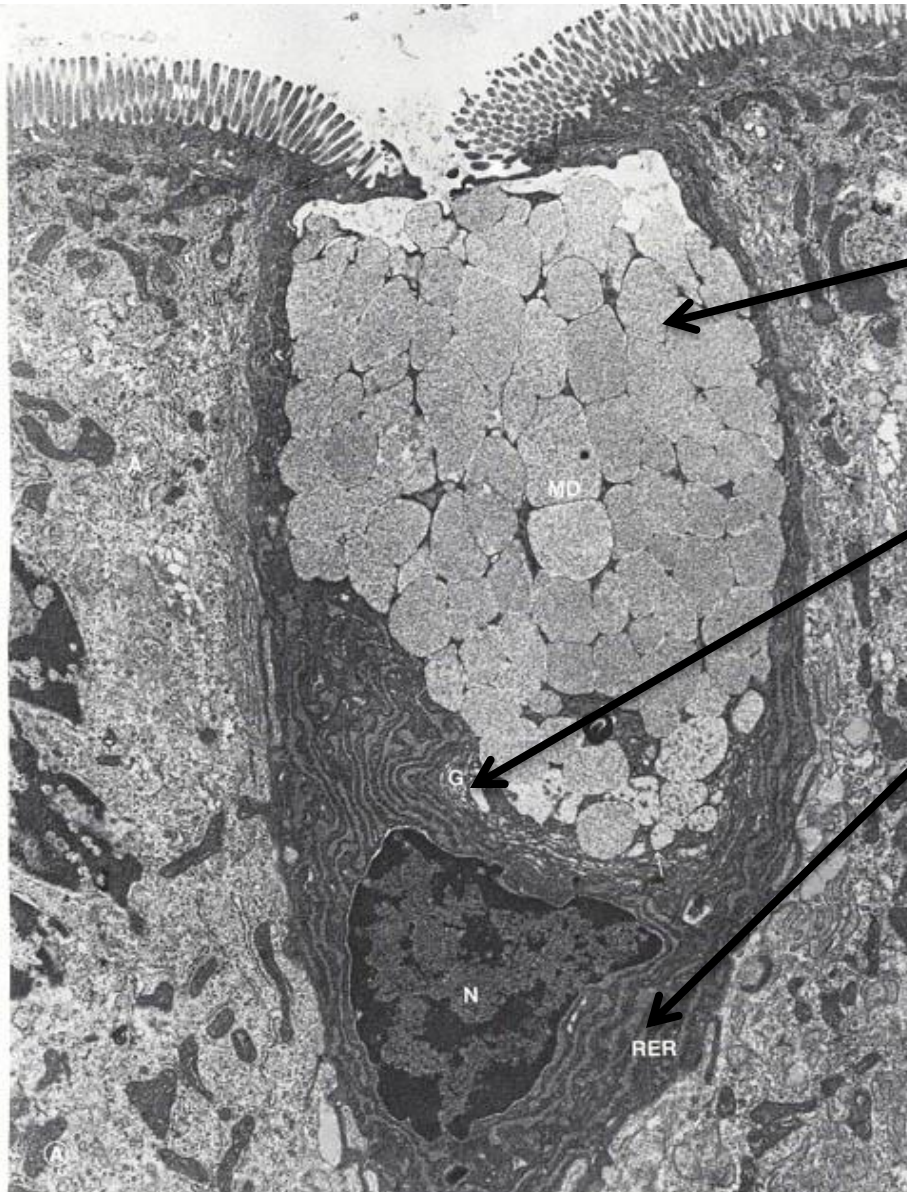
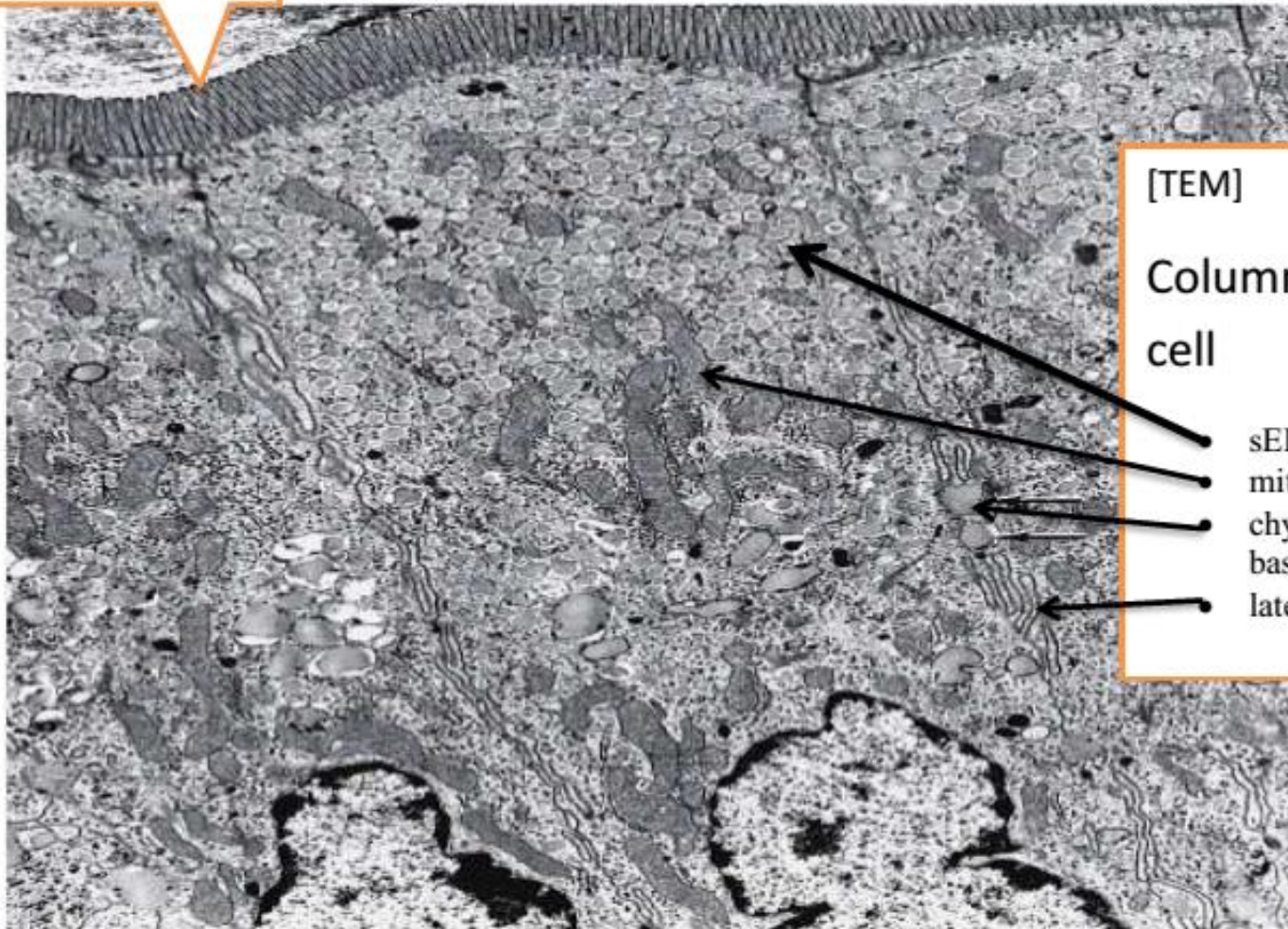
Transmission
E.M.[TEM]
Enteroendocrine cell
Open type
Microvilli of neighboring cells
Basal electron dense granules

Transmission E.M.[TEM]

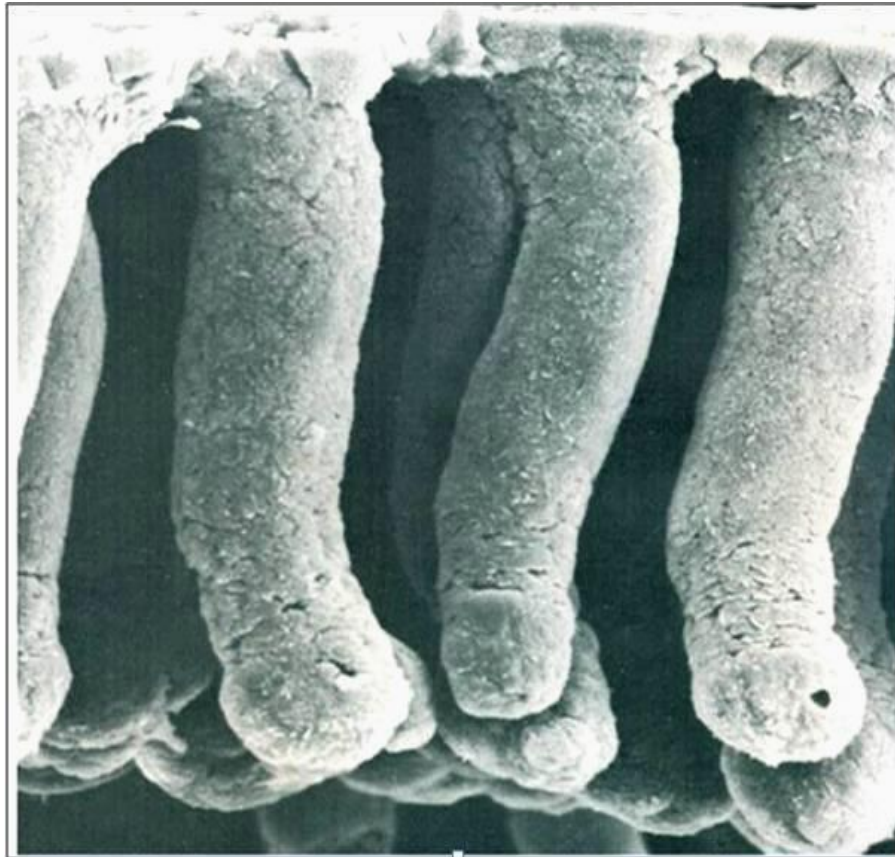
Enteroendocrine cell

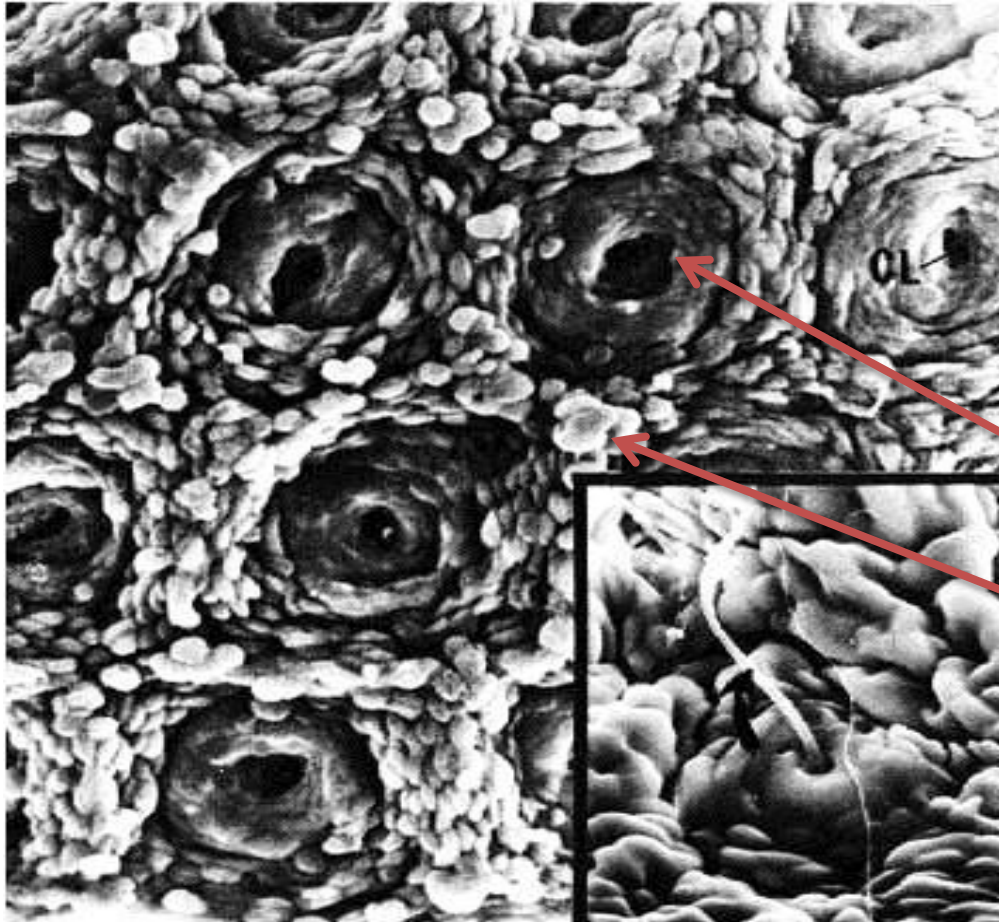
Open type

- Microvilli of neighboring cells
- Basal electron dense granules

[SEM]:
Of Part of small intestinal mucosa showing:
• Broad , tall intestinal villi projecting above the surface
• Basal crypts invaginated from the surface

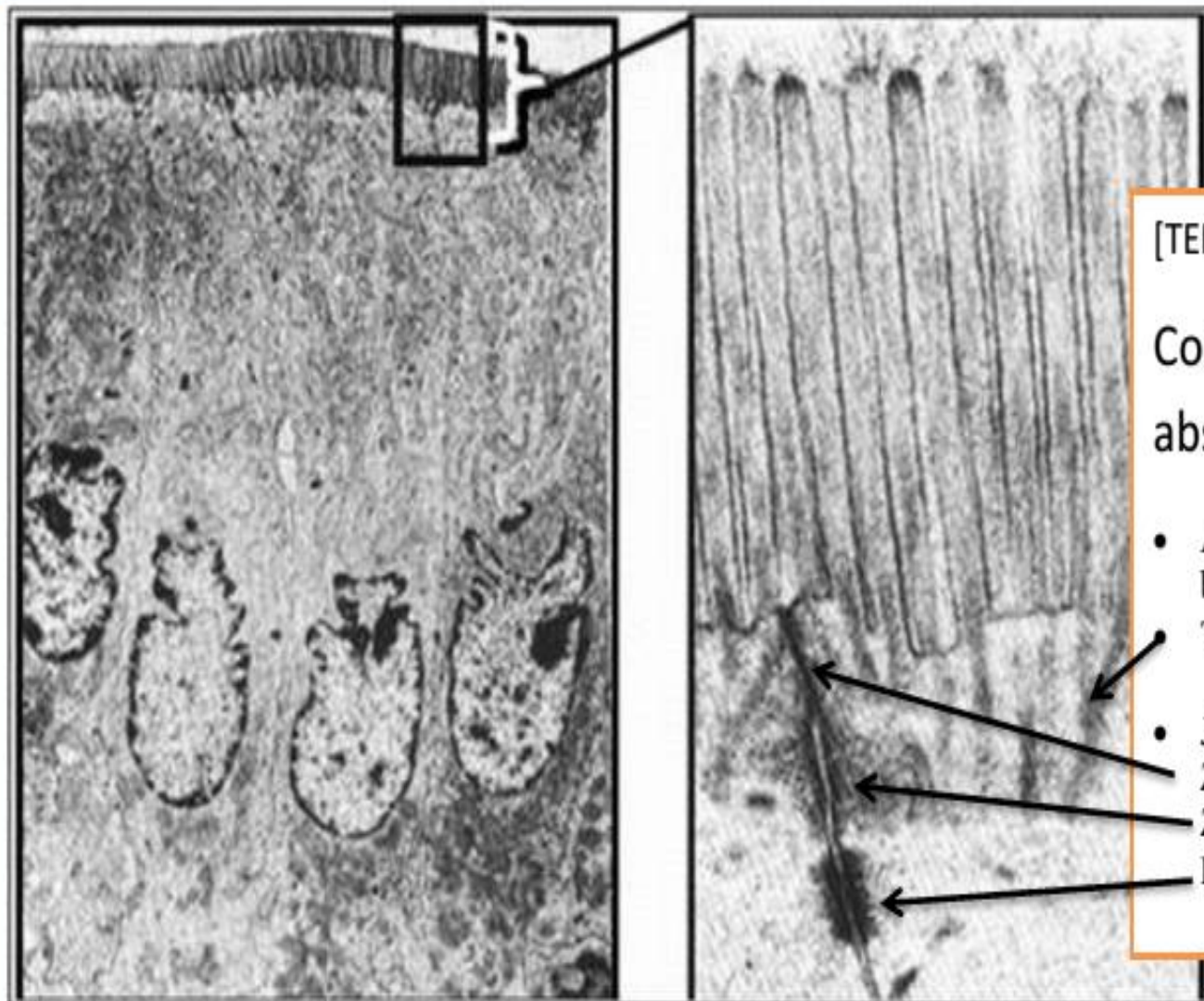
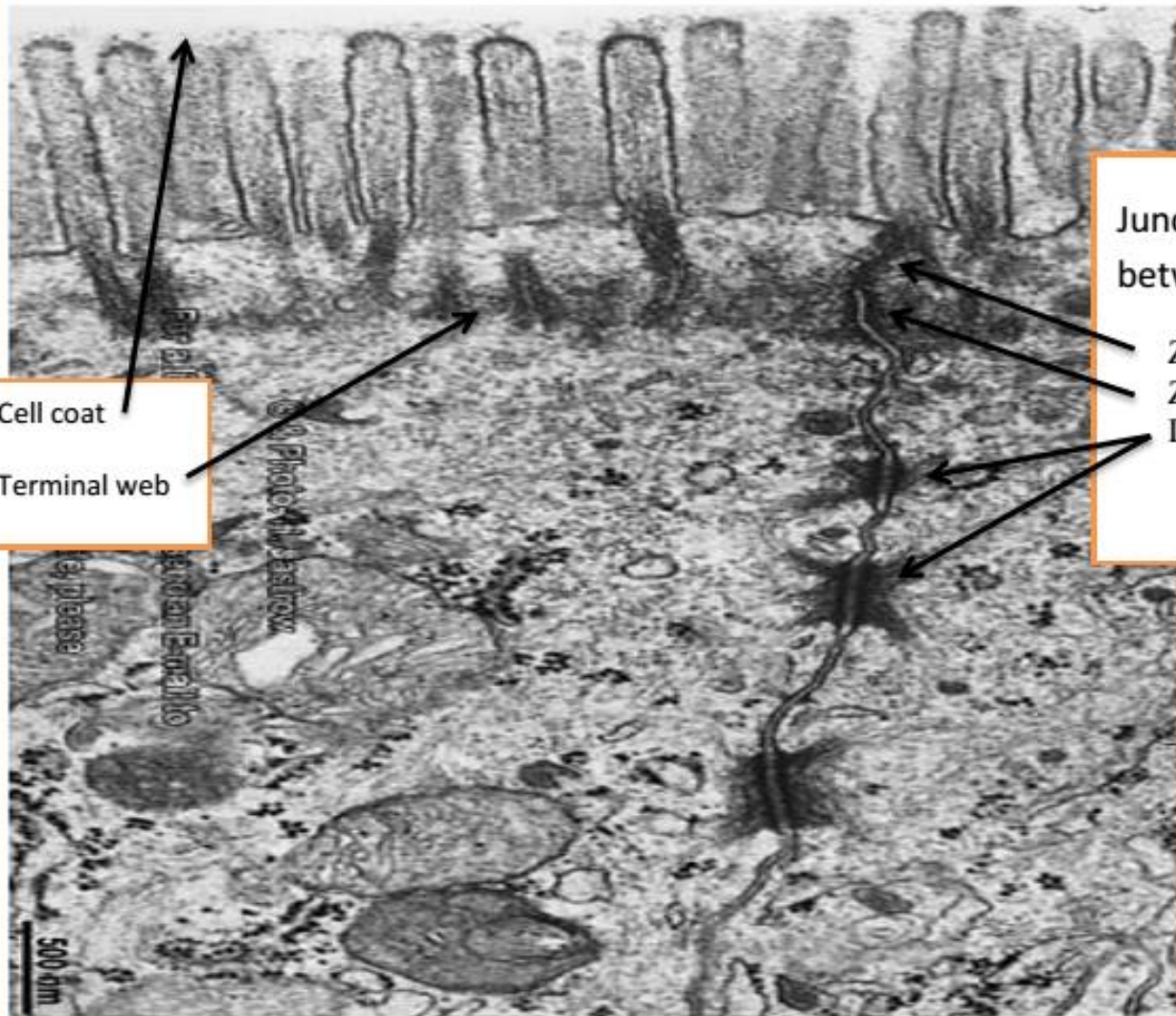
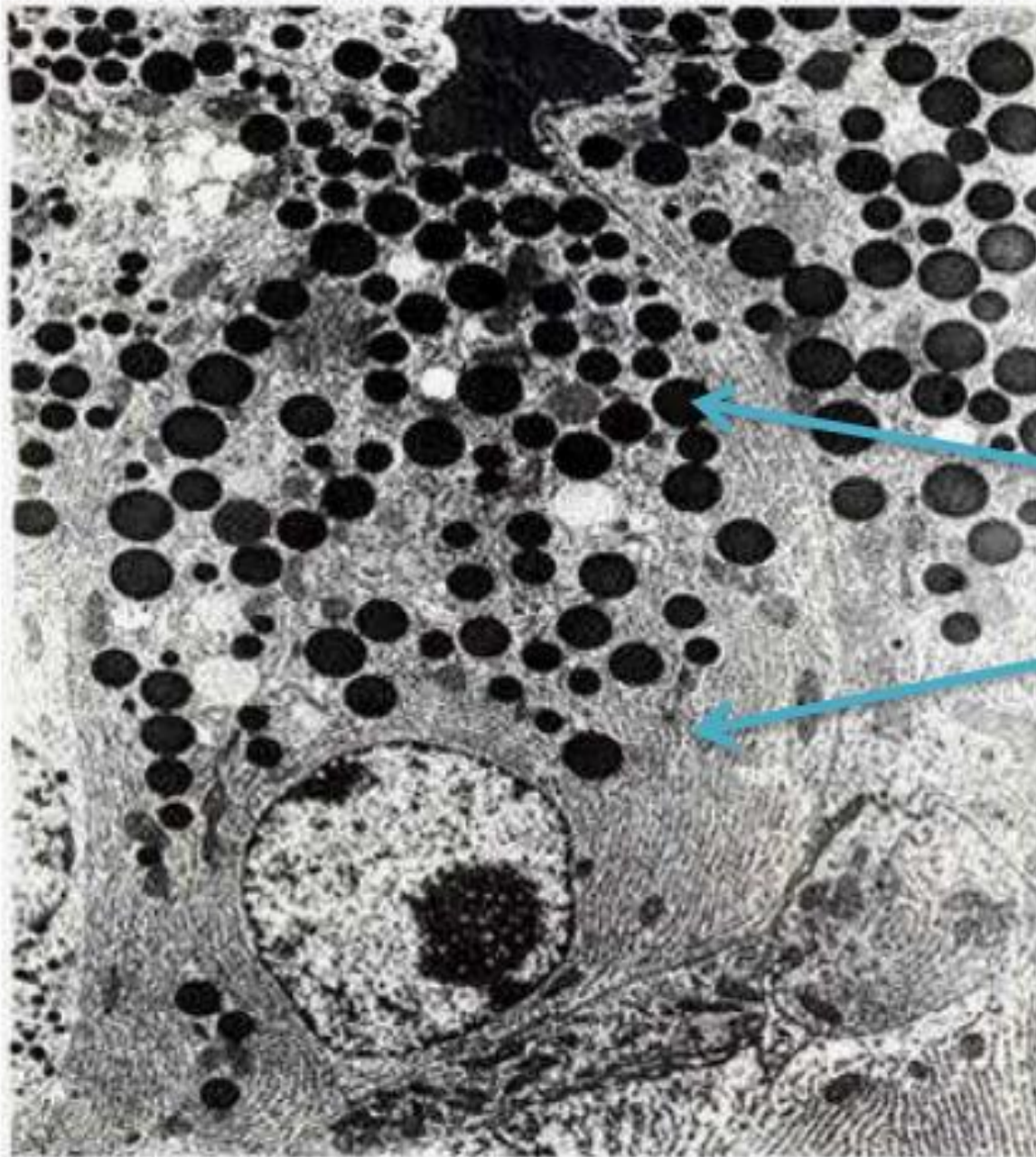
A
B

[TEM] showing
part of small intestinal crypt:
Paneth cells with apical electron dense granules
Enteroendocrine cells with basal electron dense granules

Goblet cell ("TEM")

microvilli
[TEM]
Columnar absorptive cell
sER containing fat
mitochondria
chylomicrons released at baso lateral surface
lateral interdigittion
Copyright ©2006 by The McGraw-Hill Companies, Inc.
All rights reserved.

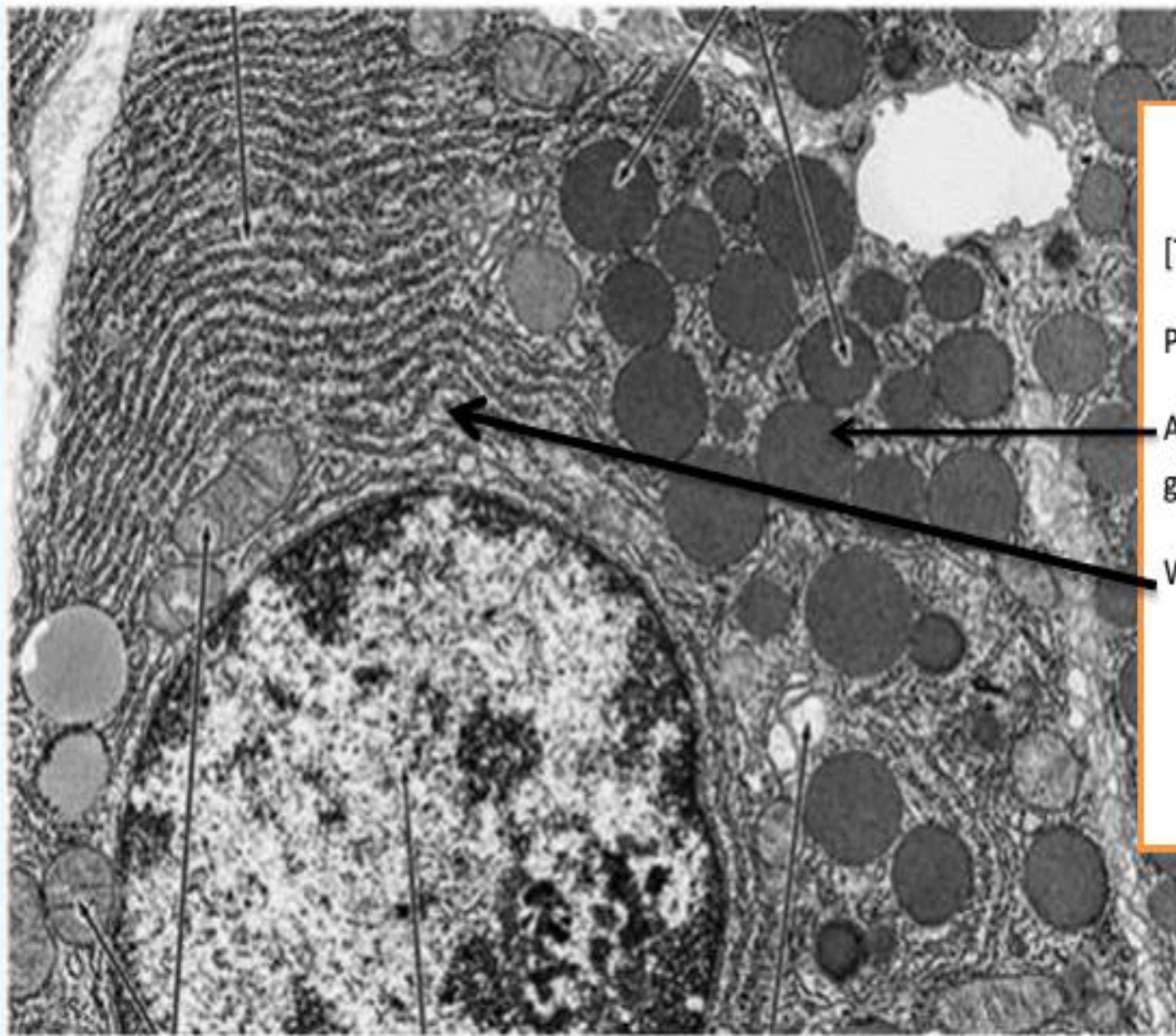
[TEM] showing:
Columnar absorptive cell of colon
Apical microvilli
Basolateral infoldings
Golgi

[SEM] showing part of large intestinal mucosa:

Long crypts perpendicular to the surface

[SEM]
Large intestine crypts

Opening of crypt

Goblet cells

[TEM] showing:
Columnar
absorptive cell
• Apical microvilli brush bortder
• Terminal web
• Junctional complex:
Zonula occludanse
Zonula adherence
Desmosome

Cell coat
Terminal web
Junctional complex between 2 enterocytes
Zonula occludanse
Zonula adherence
Desmosomes
500 nm

[TEM] showing:

Pancreatic acinus

Apical electron dense granules

Well developed rER

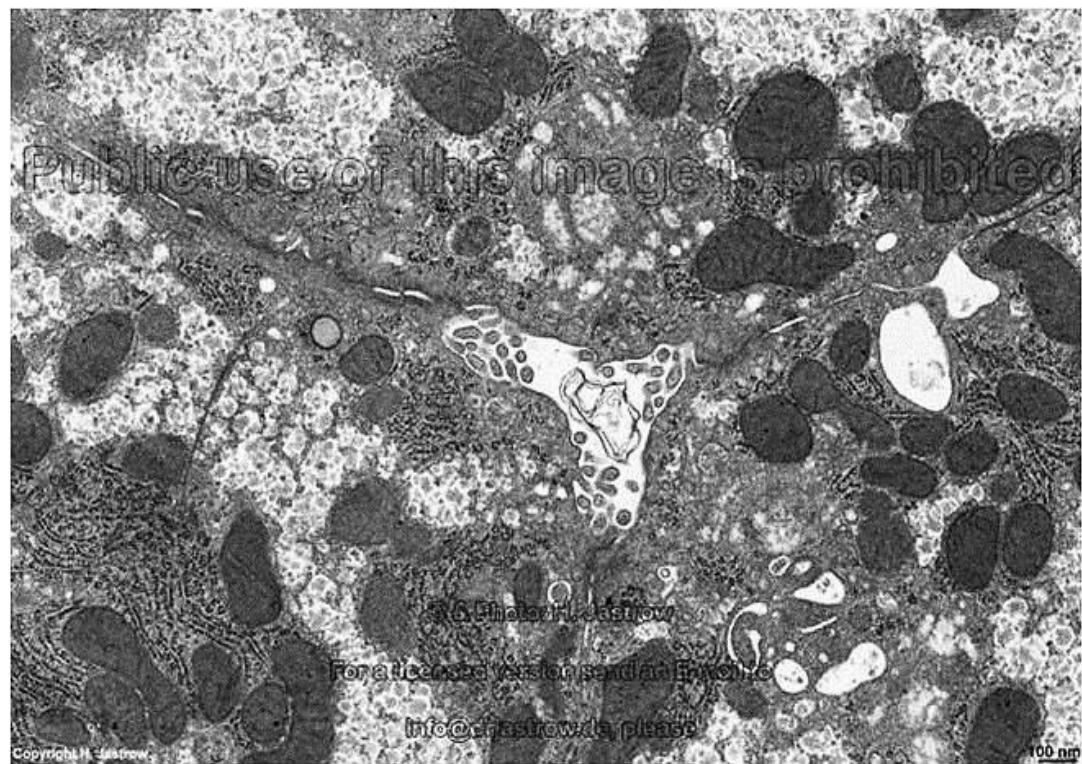
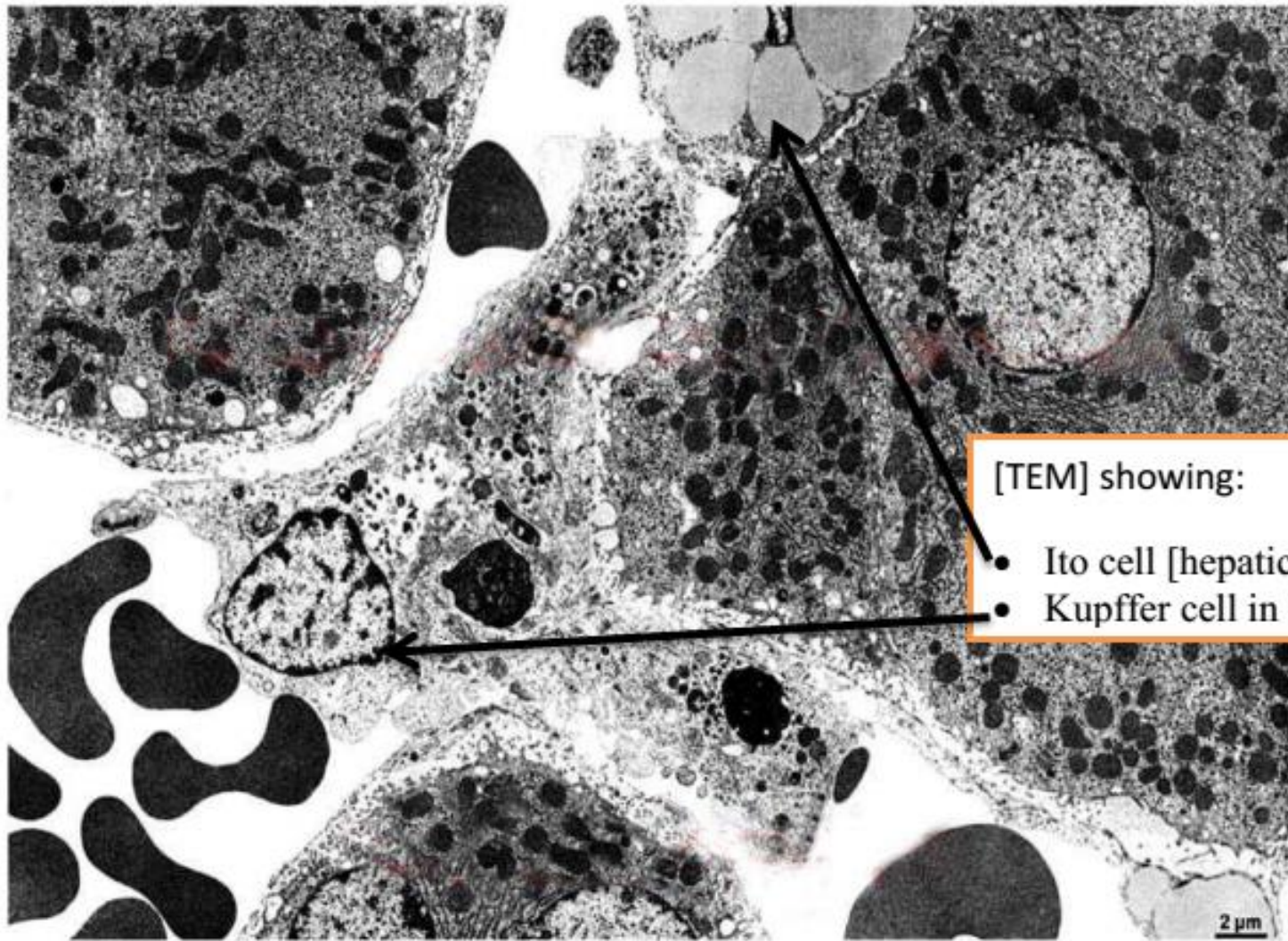
[TEM] showing:
Pancreatic acinus
Apical electron dense granules
Well developed rER

[TEM] showing :

Bile canaliculus

Tight junction

microvilli

Public use of this image is prohibited
Copyright H. Jastrow
100 nm

[TEM] showing:
• Ito cell [hepatic stellate cell]
• Kupffer cell in liver sinusoid
2 μm

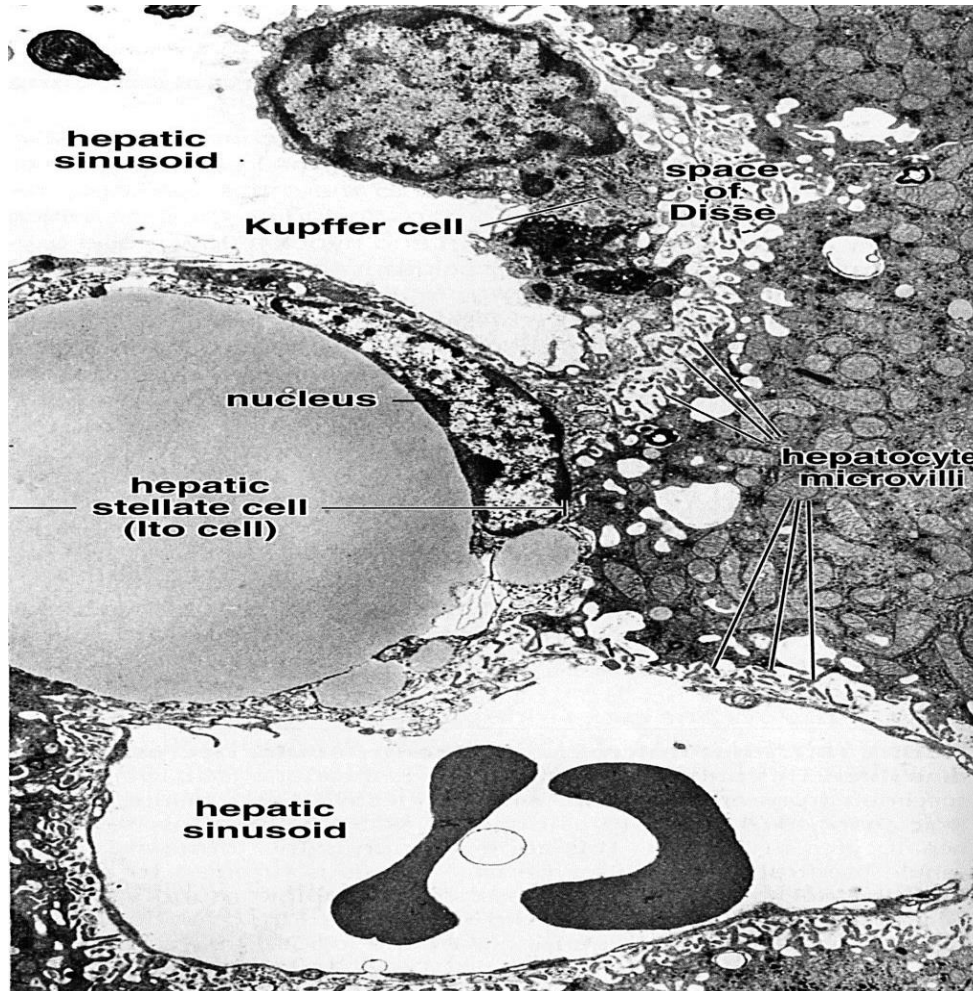
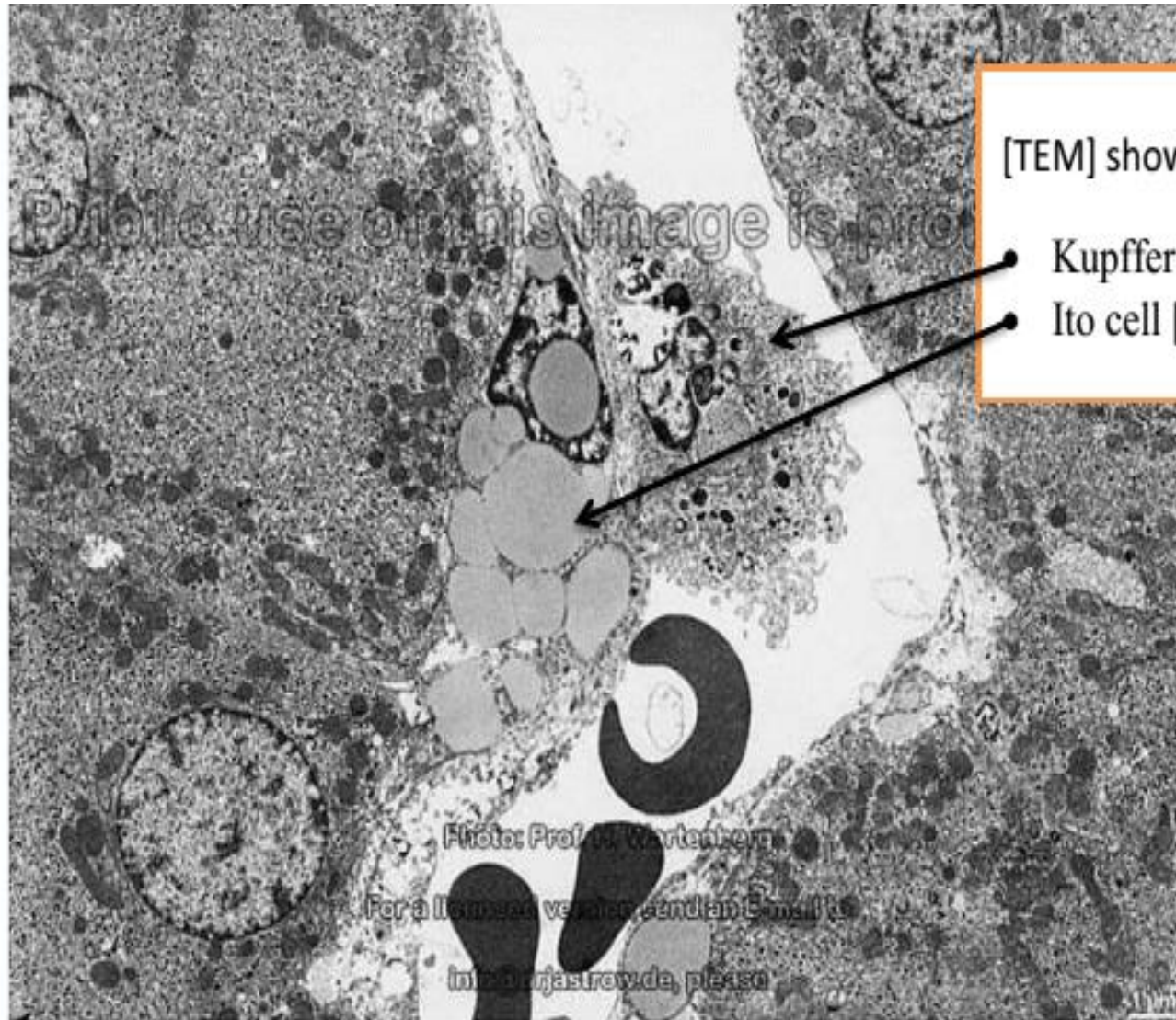
hepatic
sinusoid

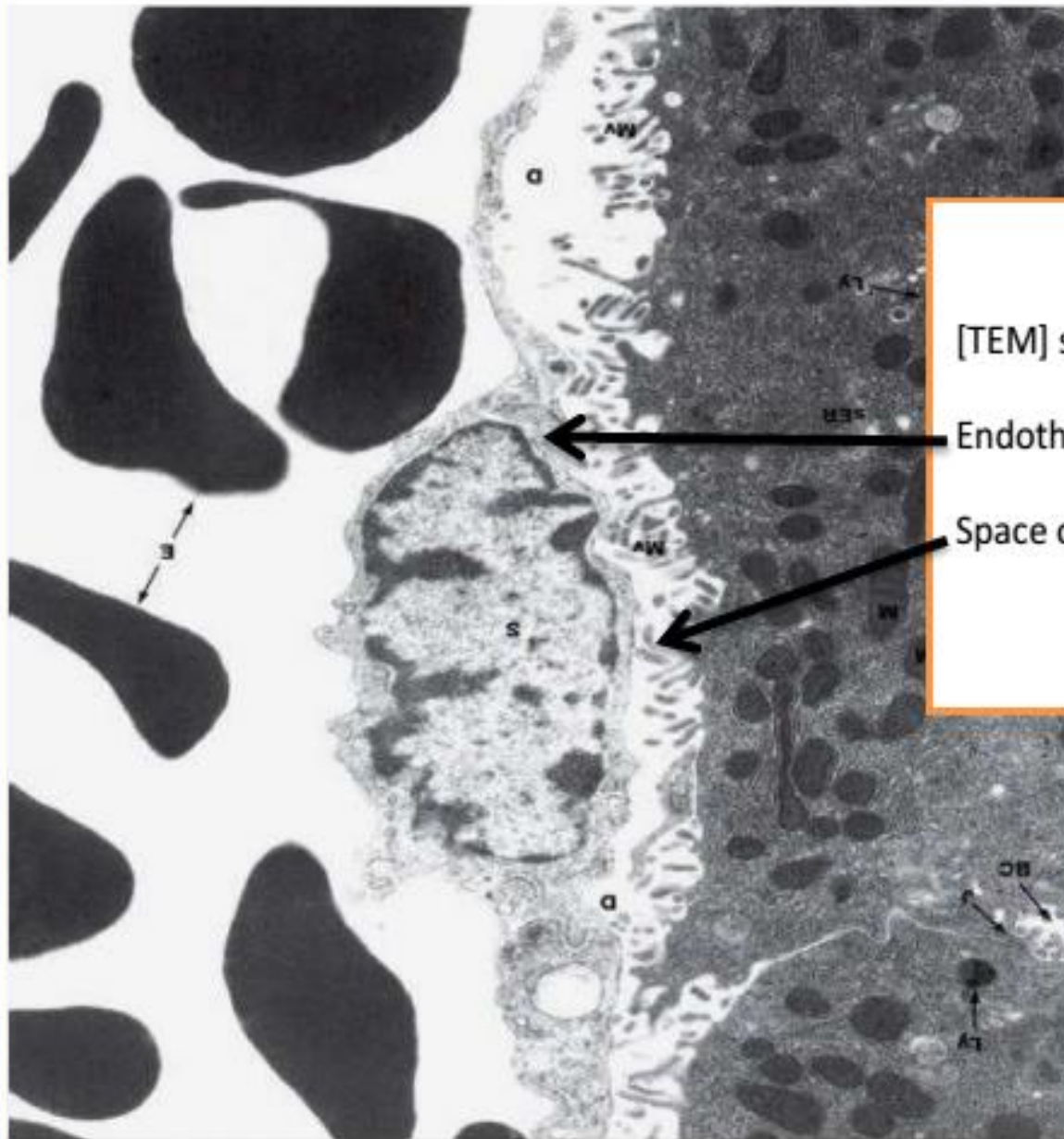
Kupffer cell

space
of
Disse

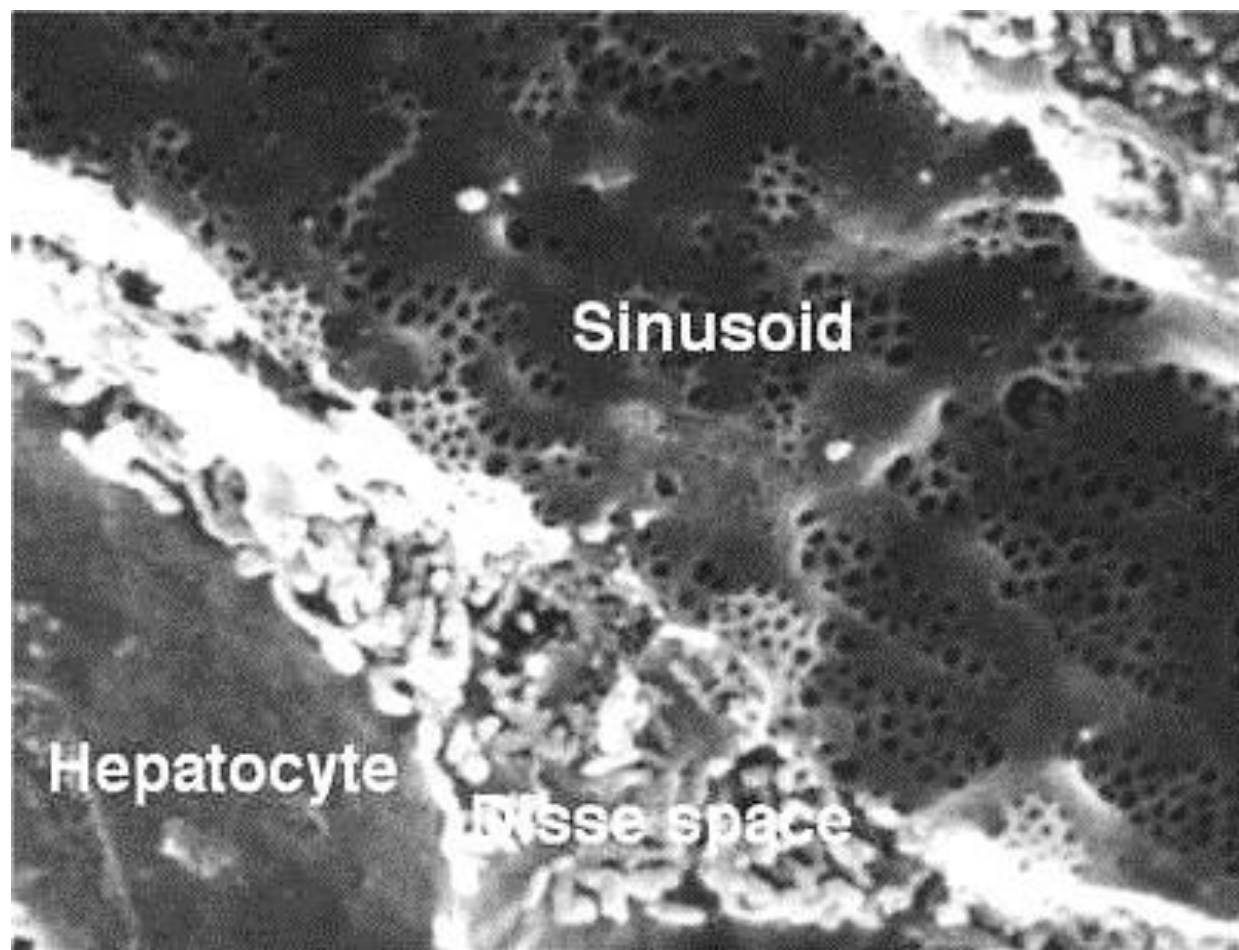
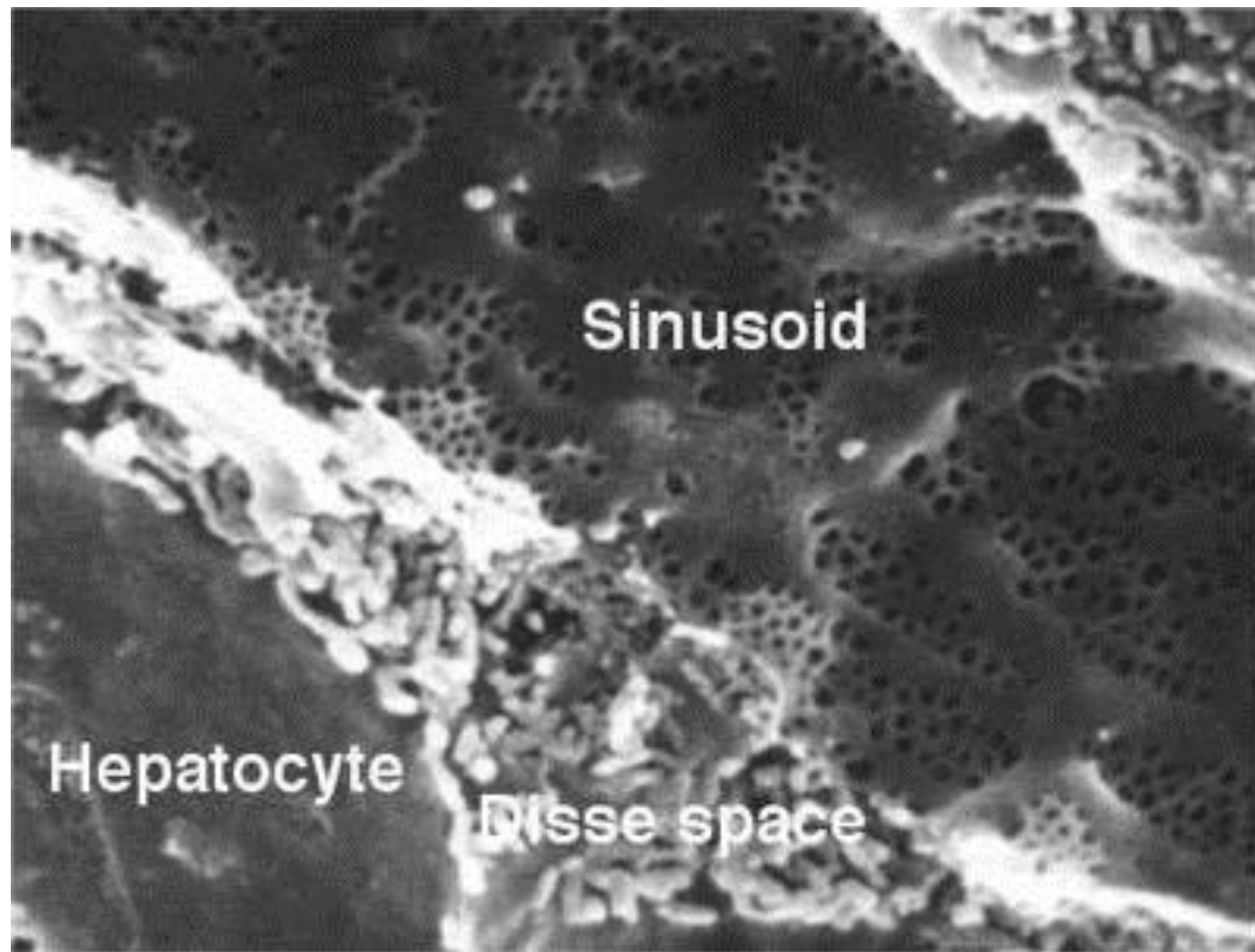
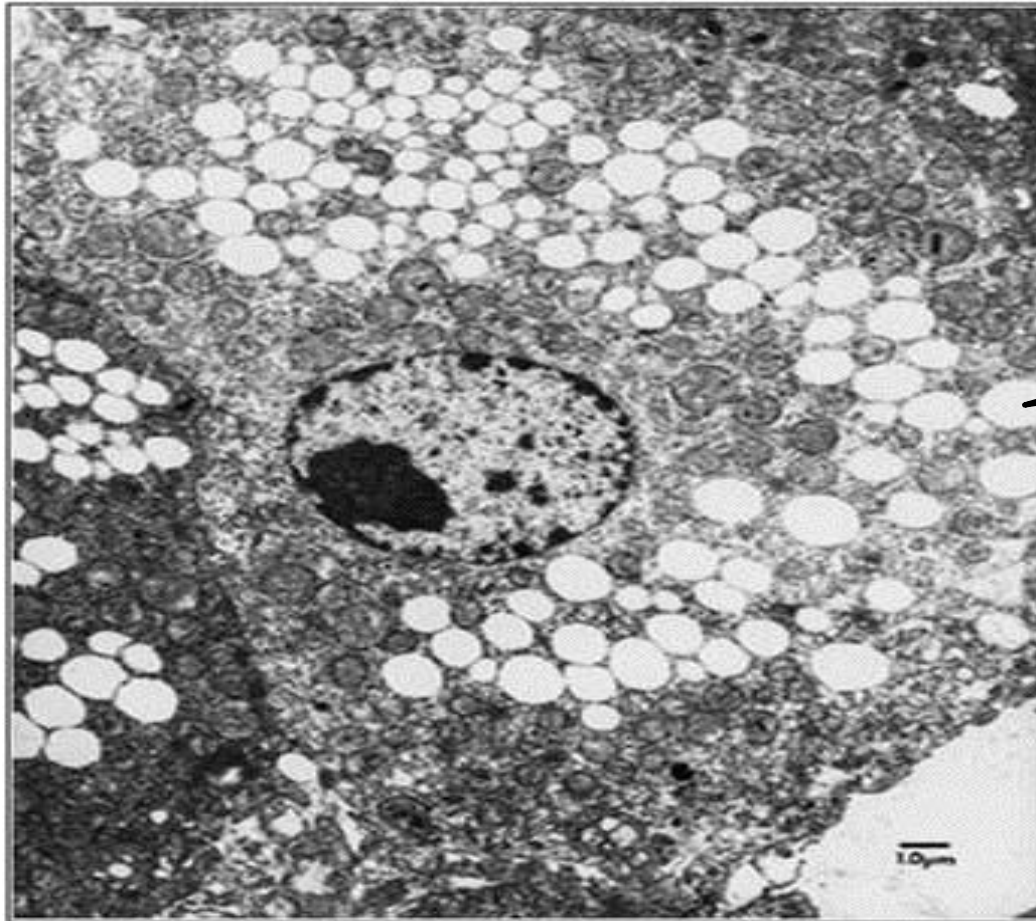
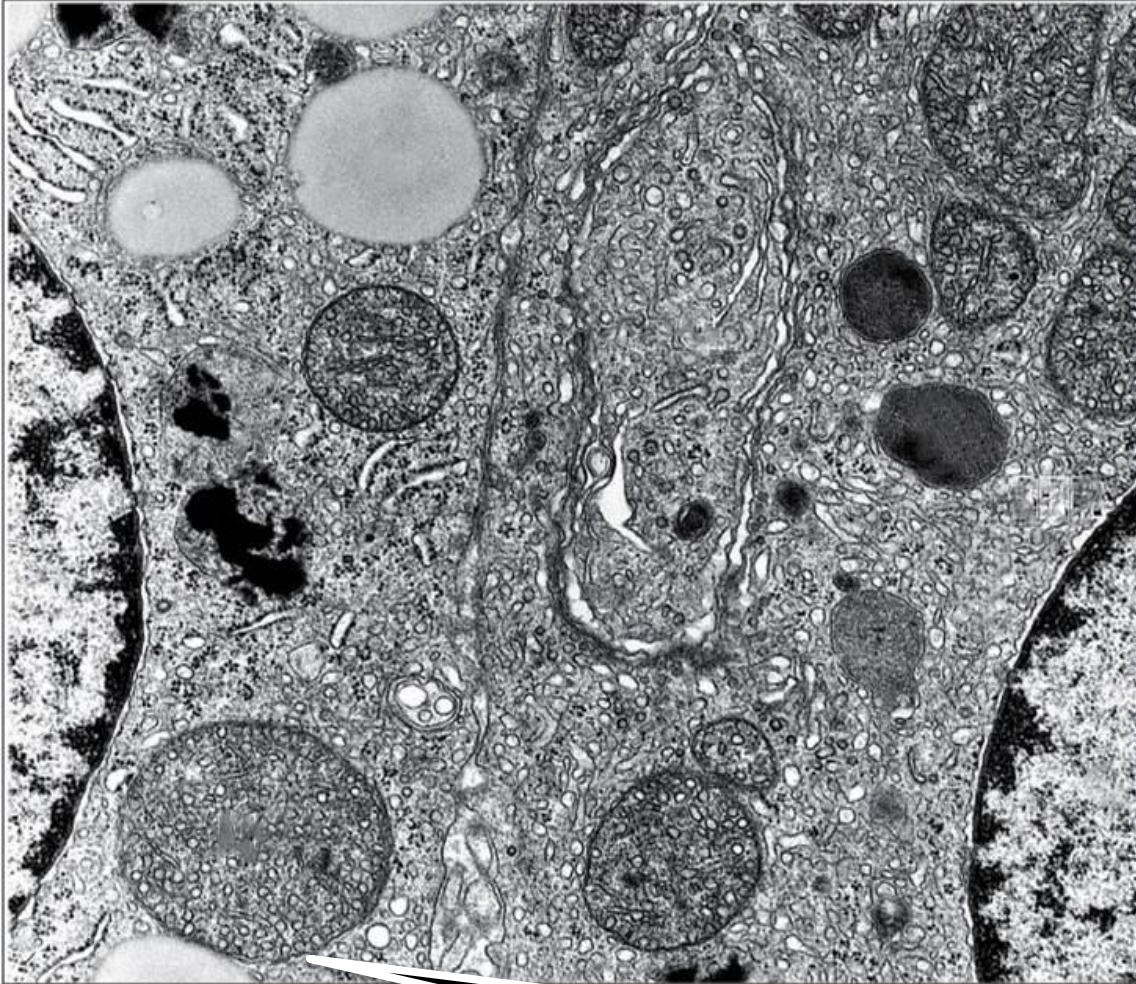
nucleus

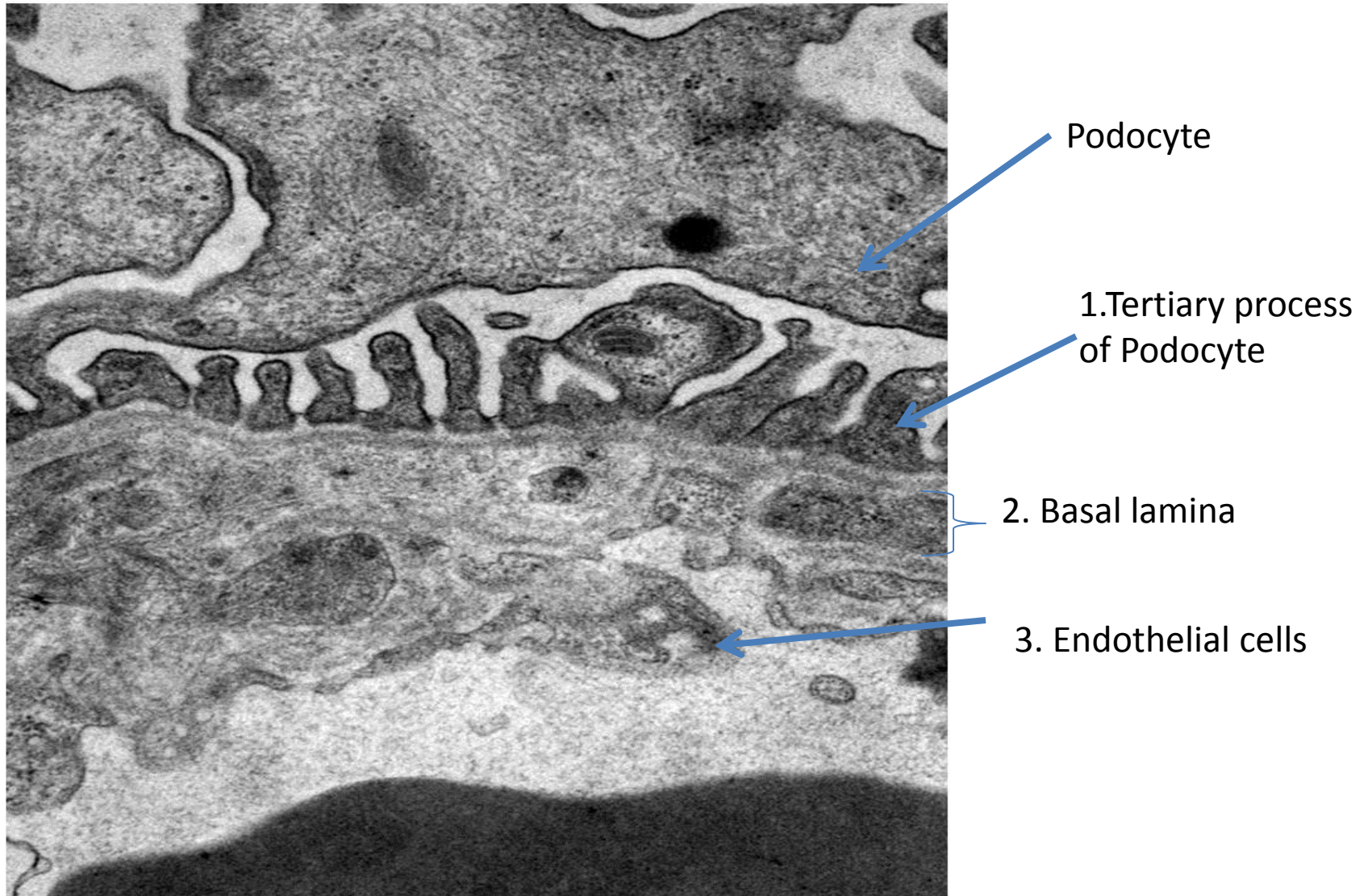
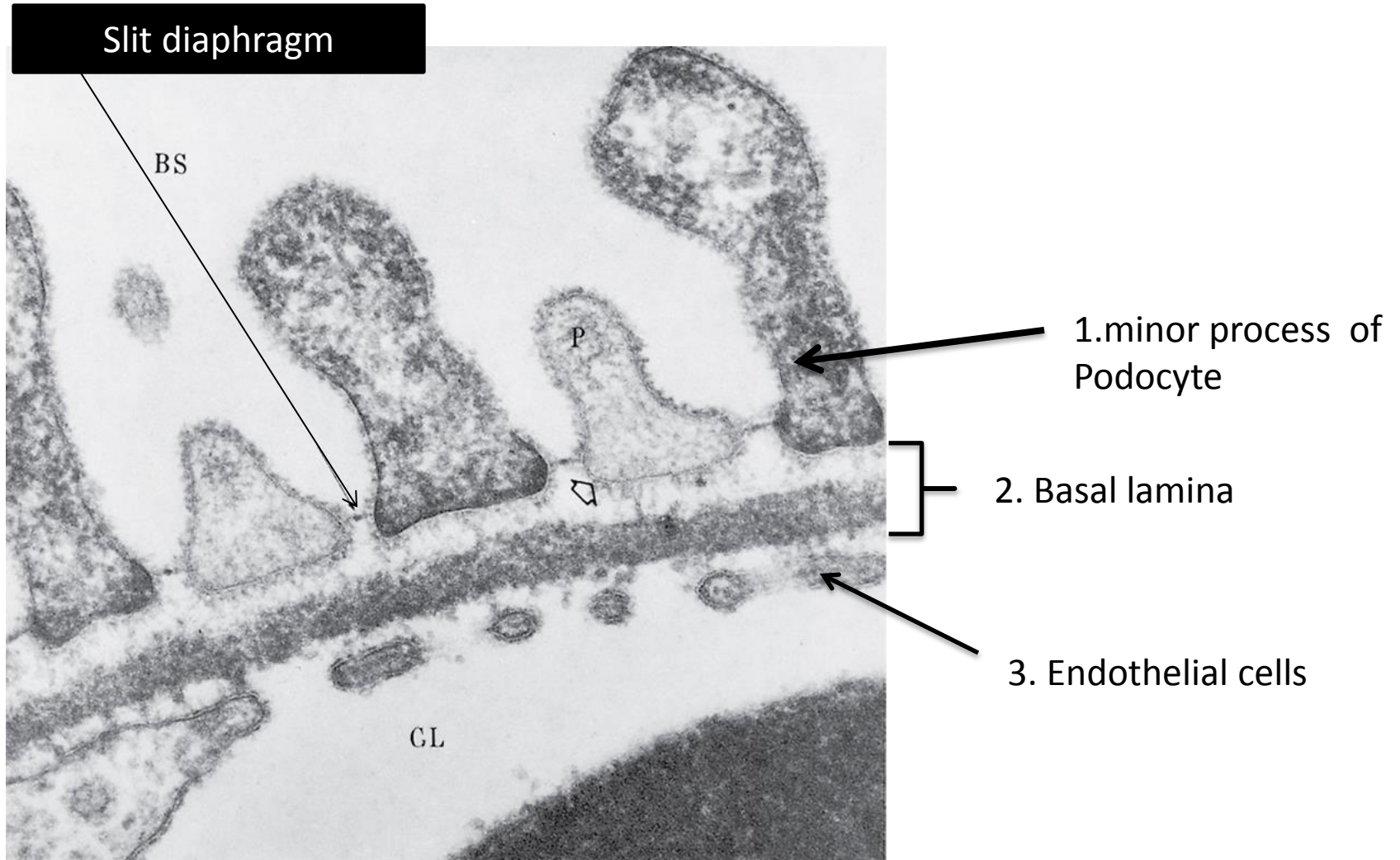
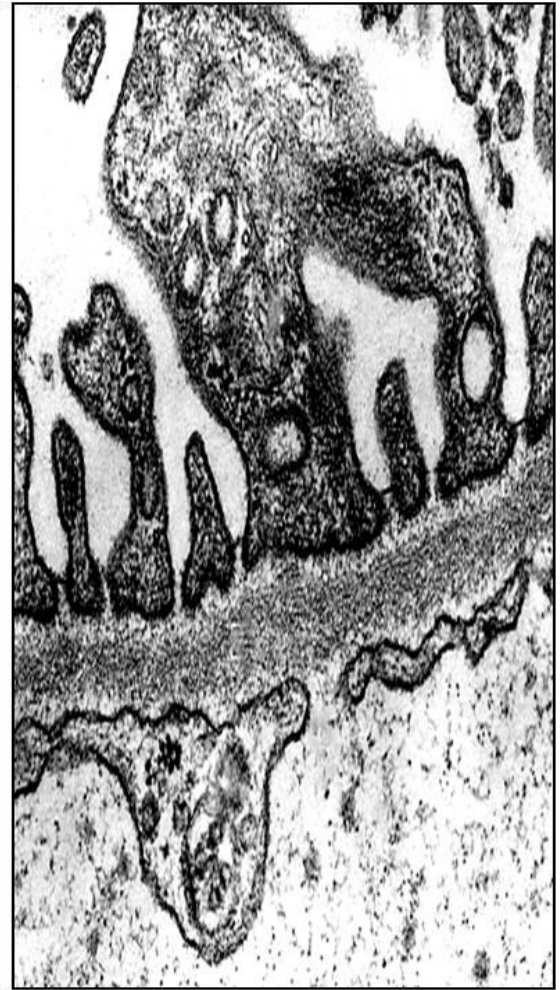
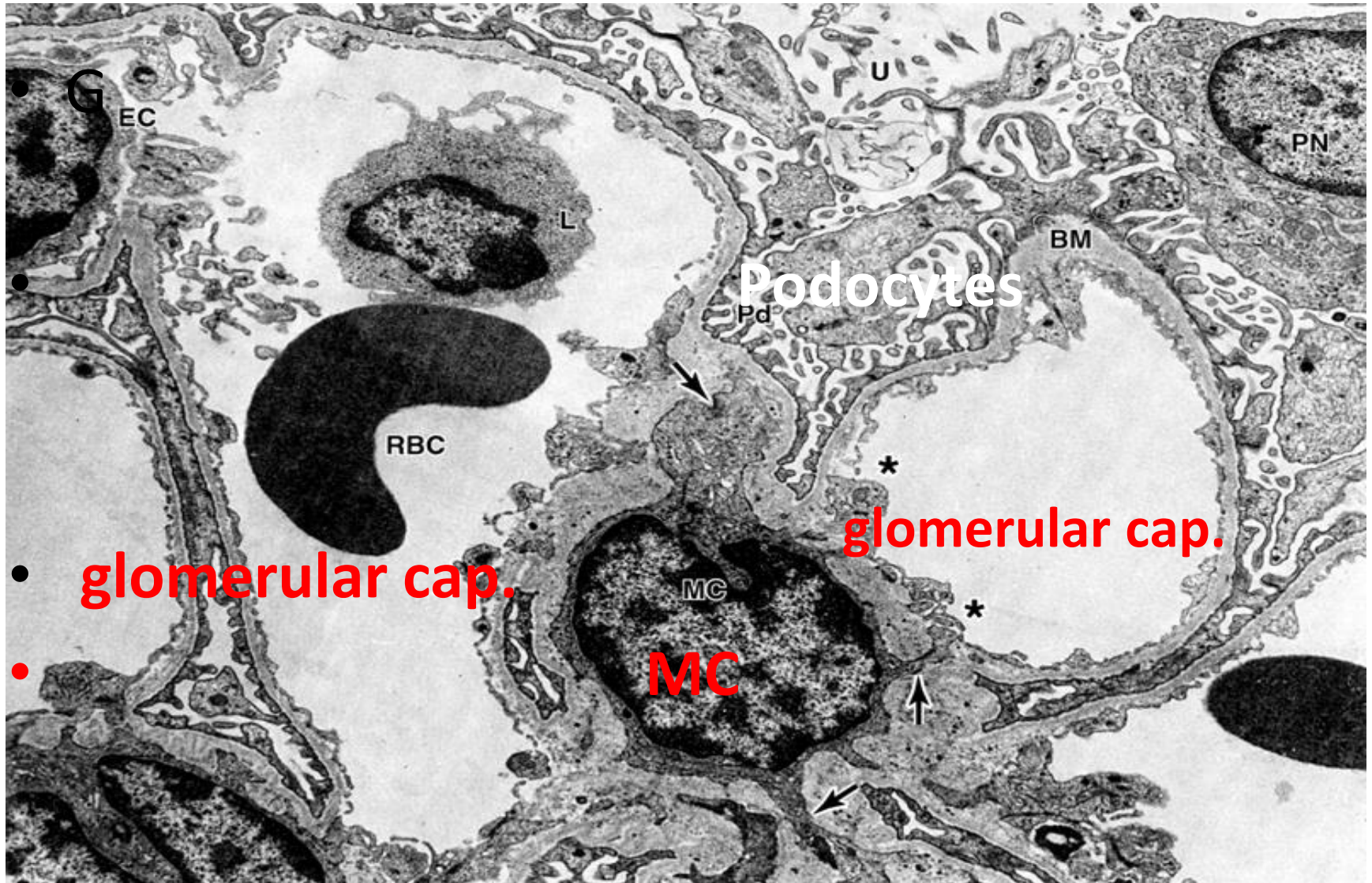
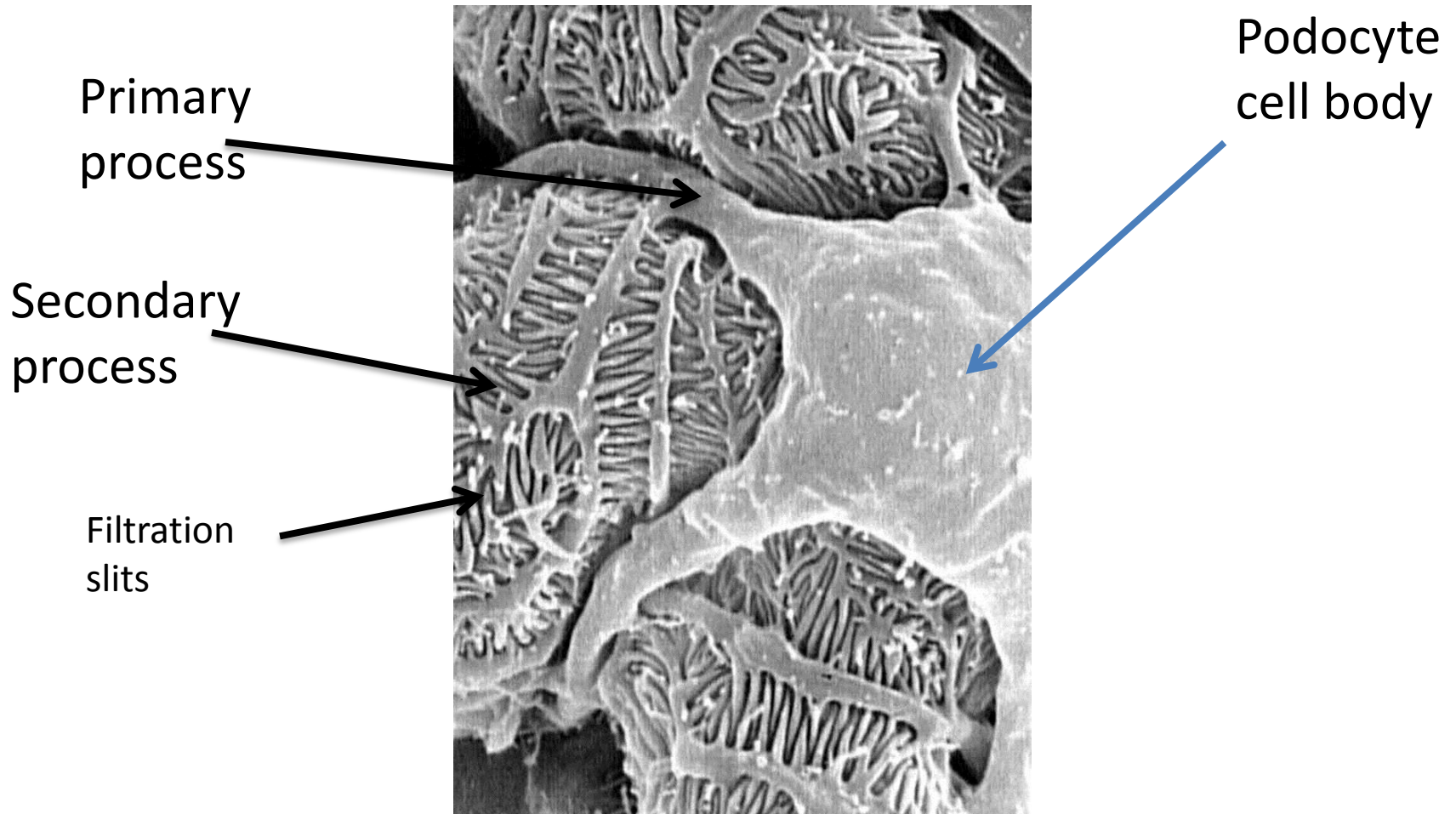
hepatocyte
microvilli

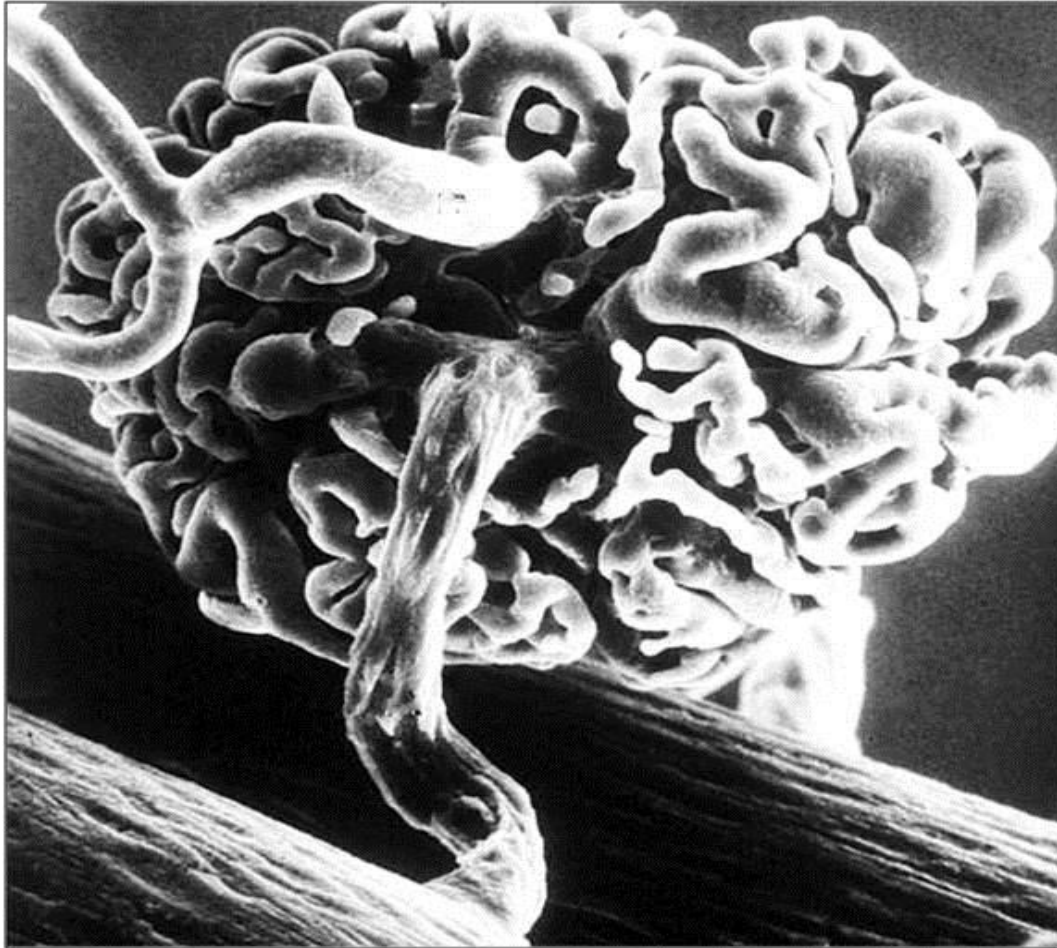
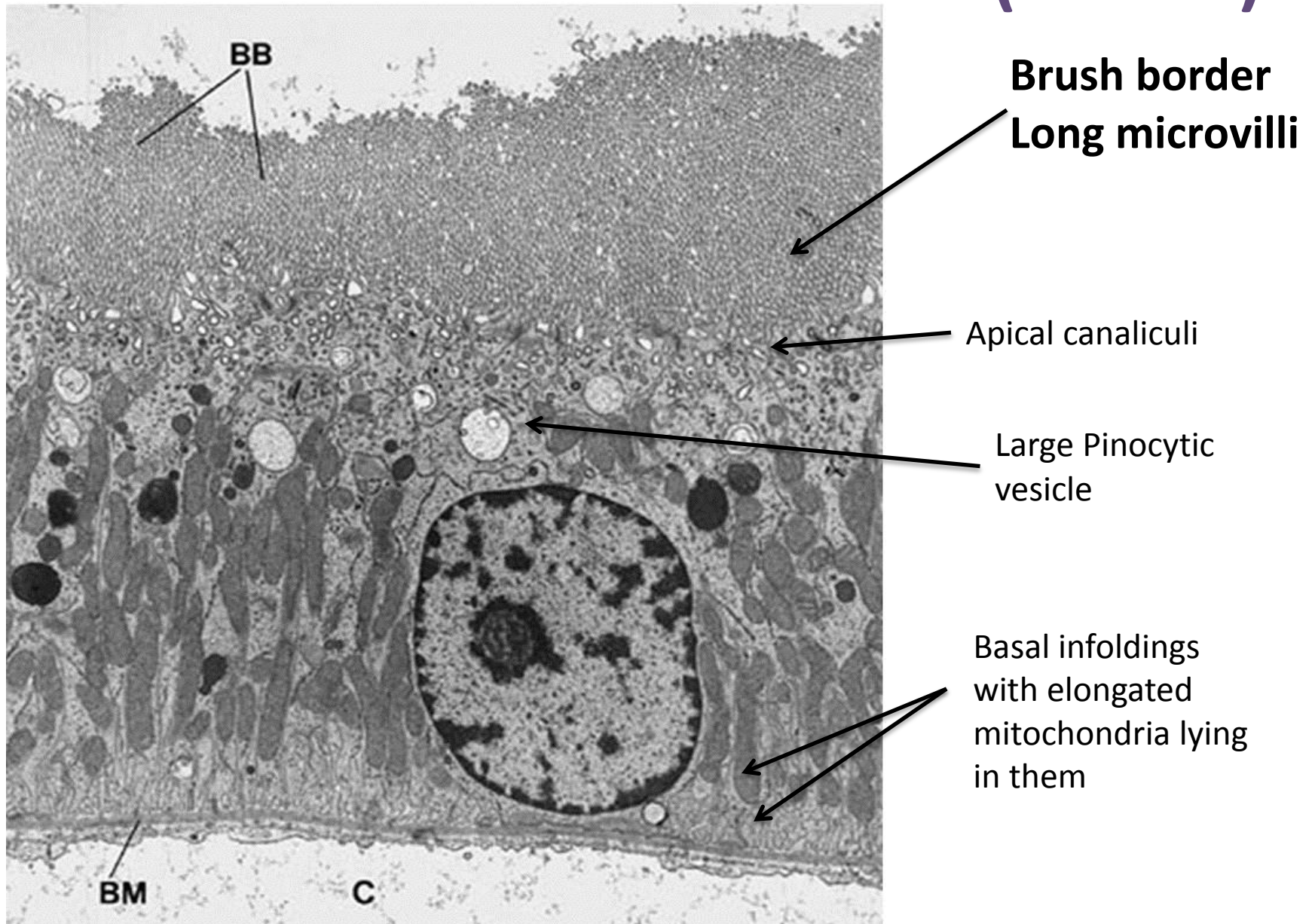
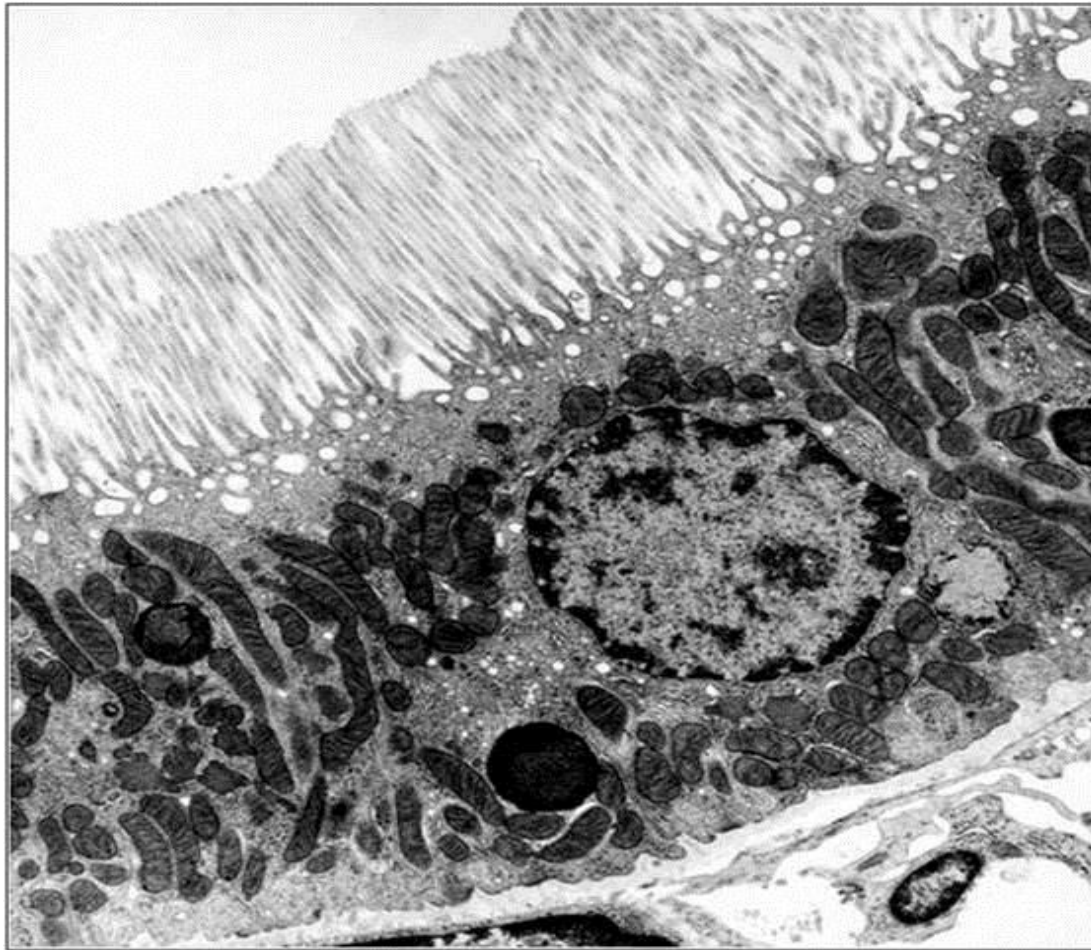
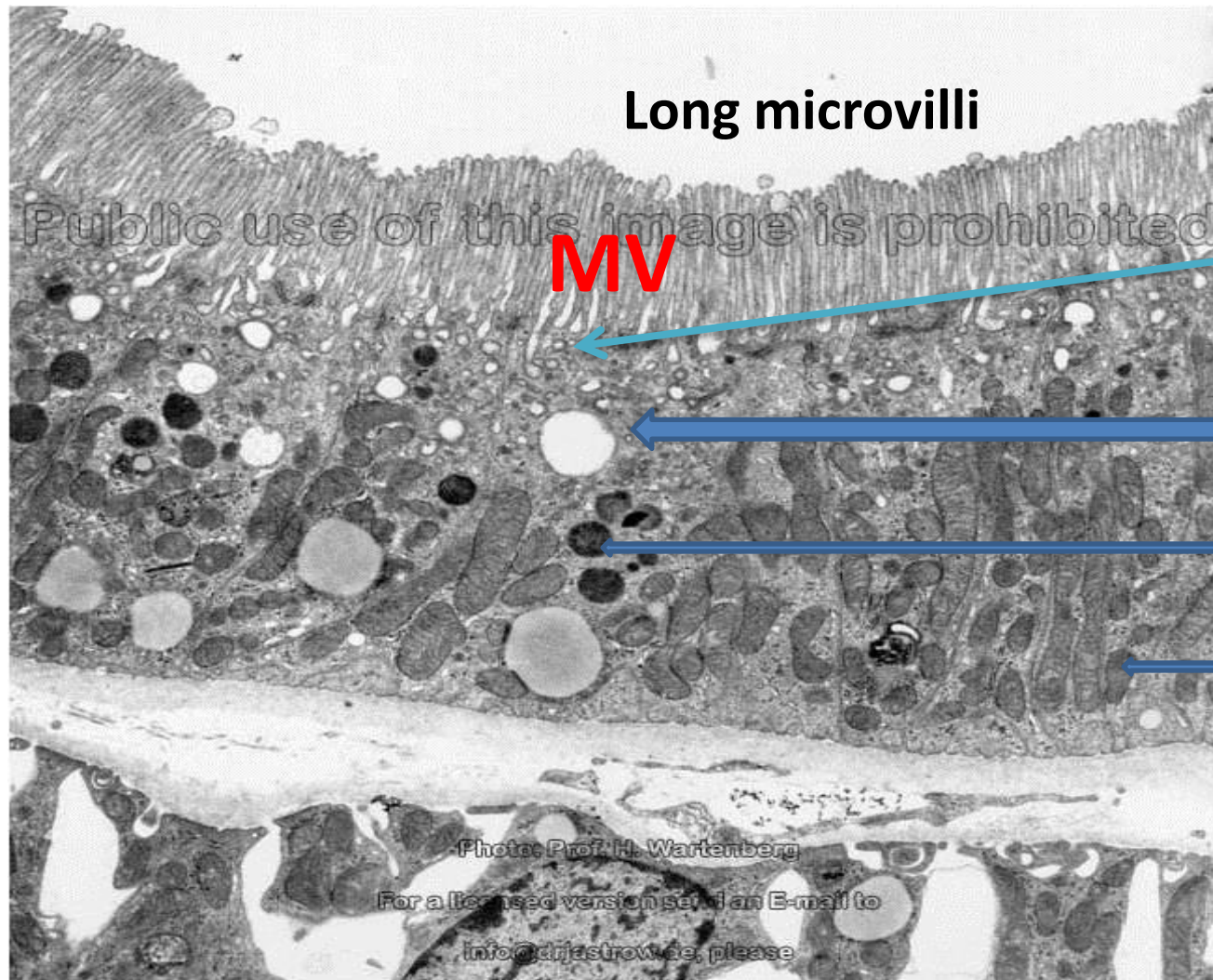
hepatic
stellate cell
(Ito cell)

hepatic
sinusoid

[TEM] showing:
Kupffer cell in liver sinusoid
Ito cell [hepatic stellate cell]

[TEM] showing
Endothelial cell lining liver sinusoid
Space of Disse containing microvilli

Sinusoid
Hepatocyte
Disse space

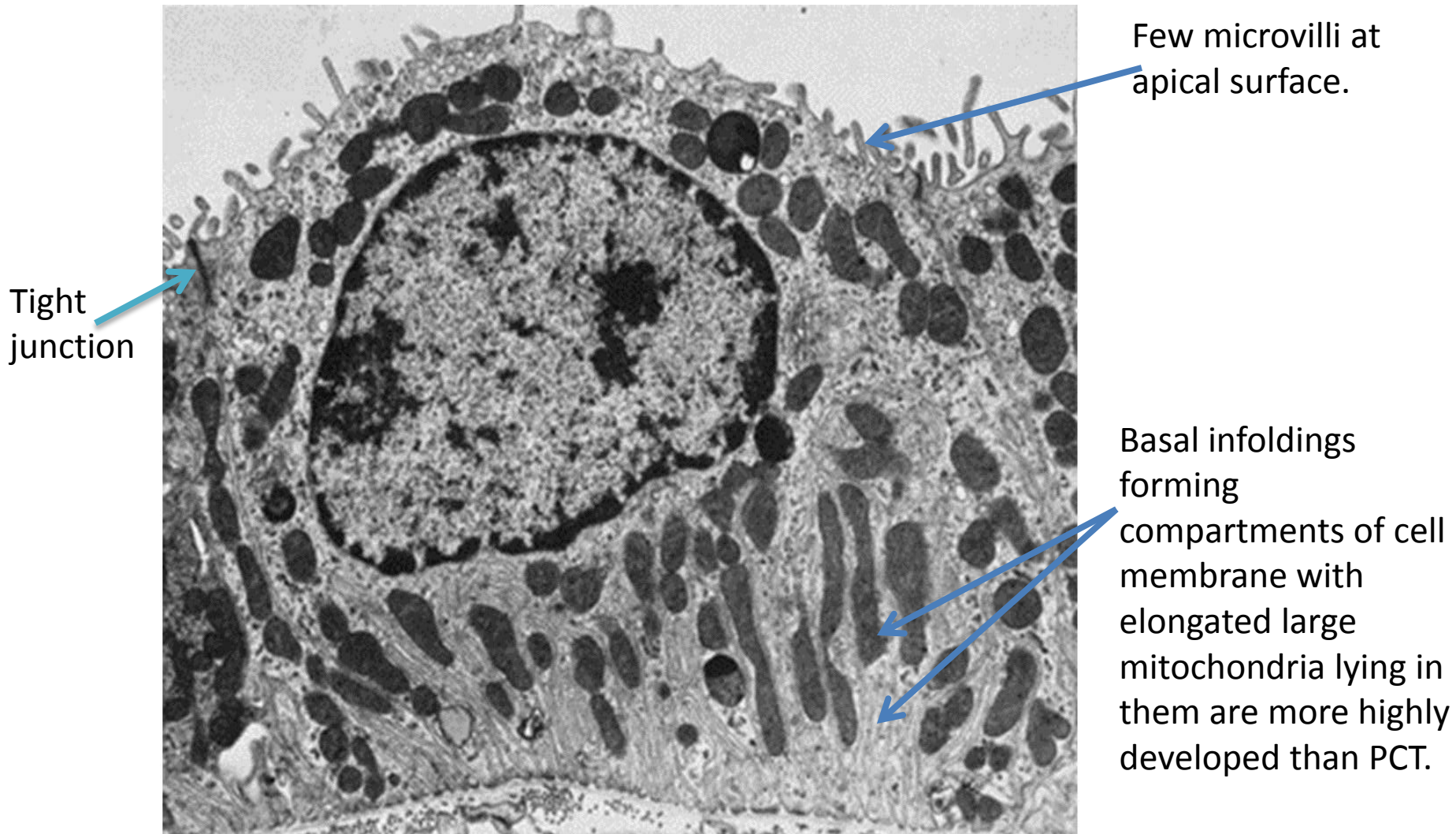
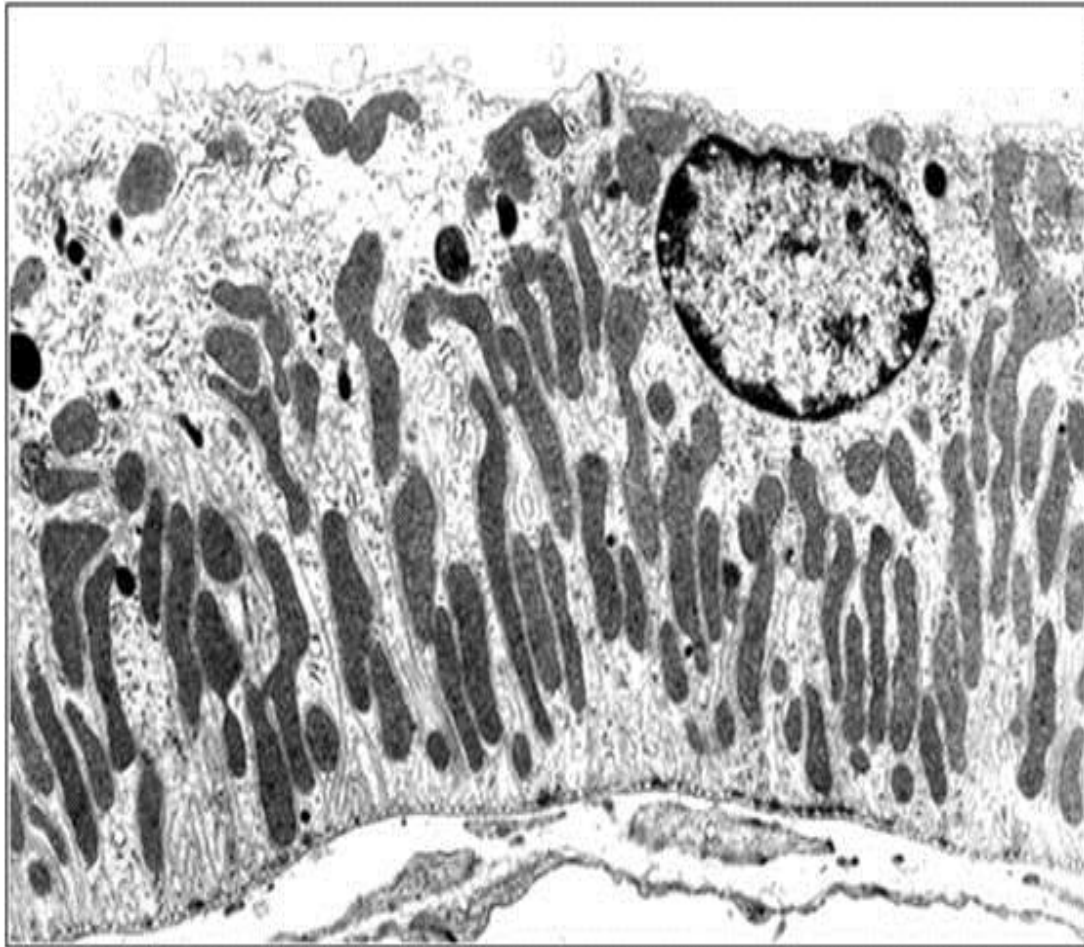
Sinusoid
Hepatocyte
Disse space

TEM of zona fasciculata cells

Steroid forming cells

Mitochondria with tubular cristae

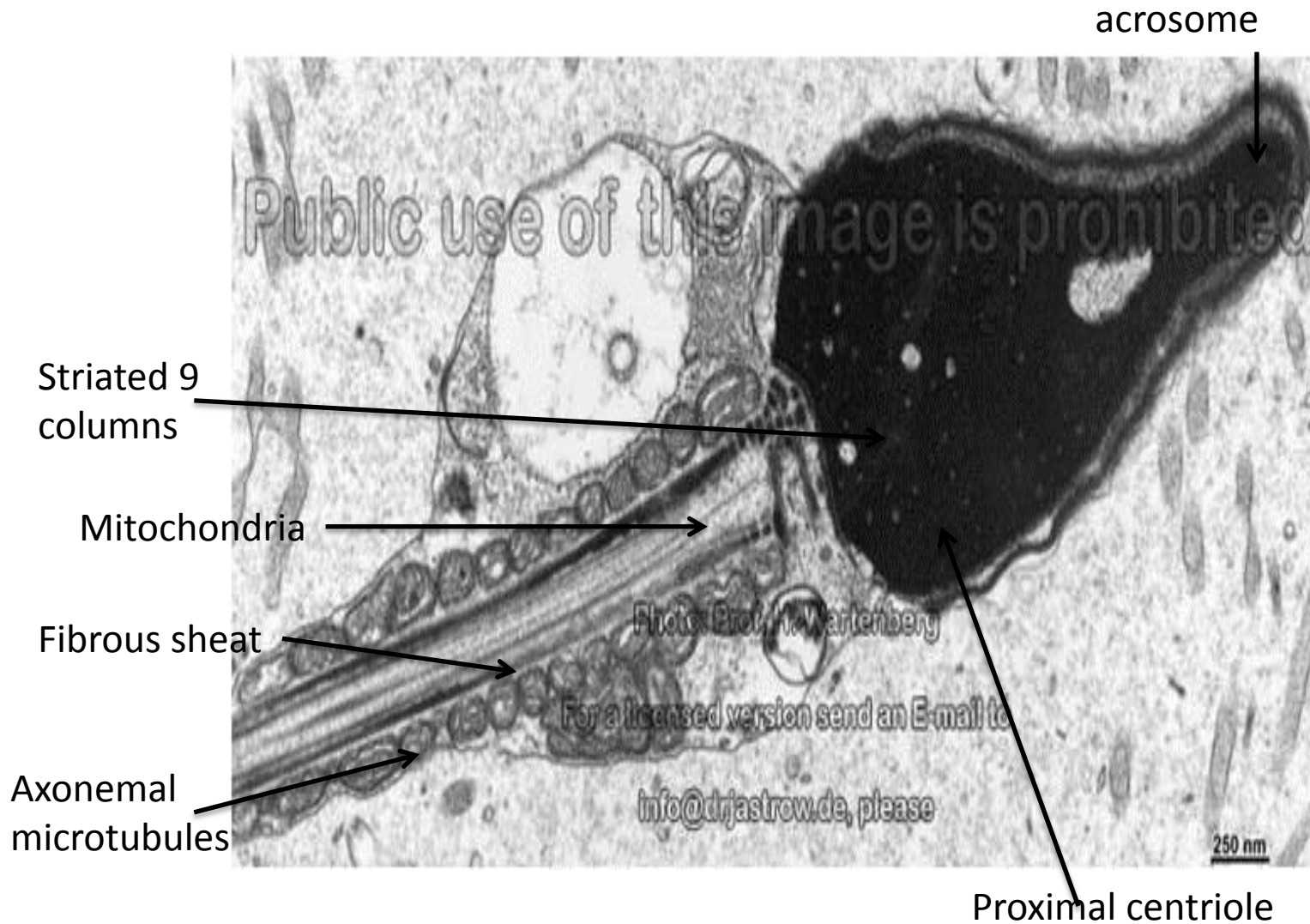
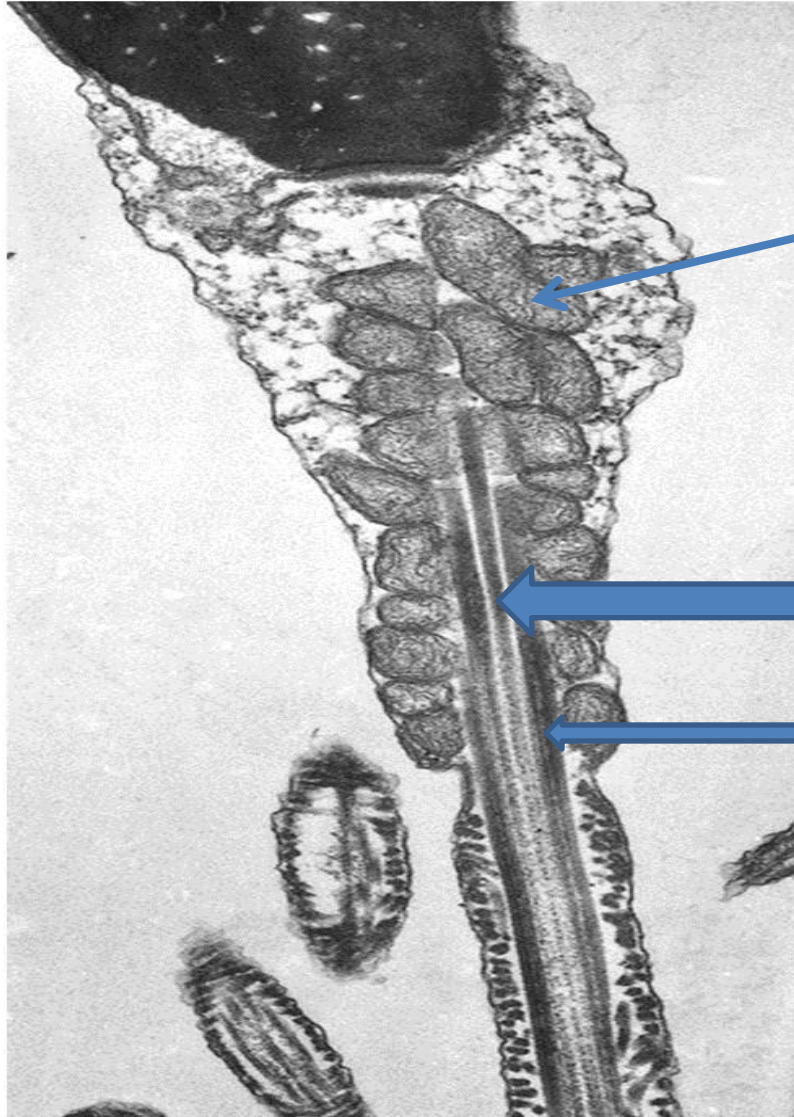
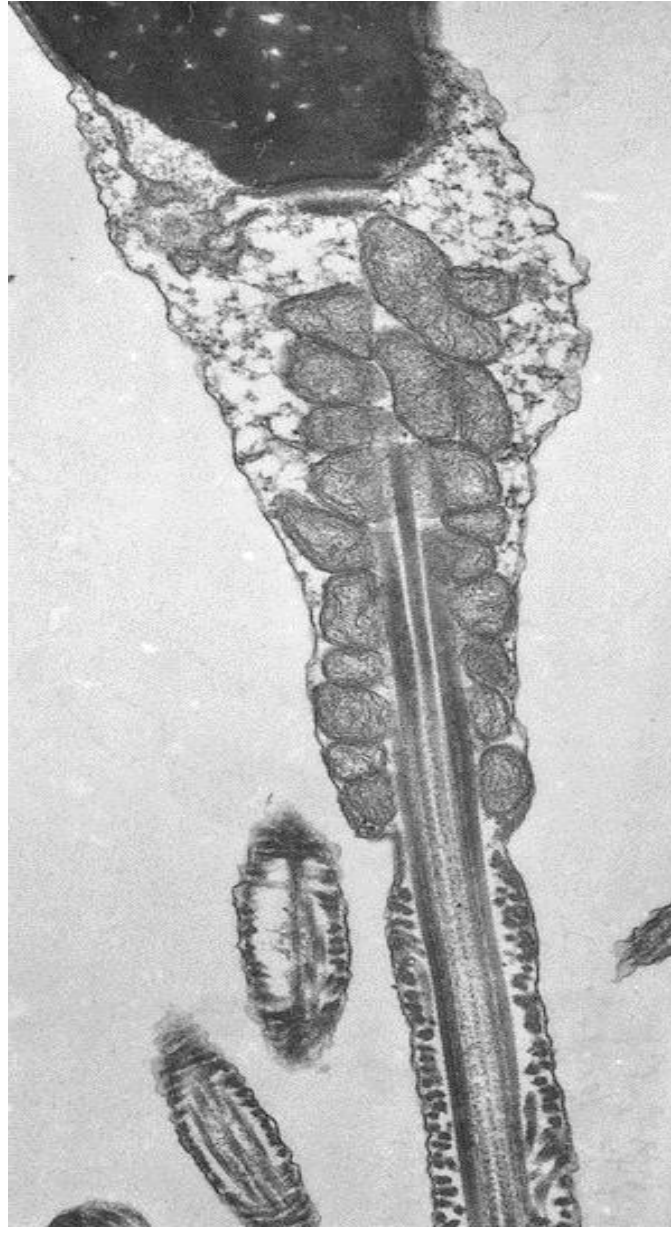
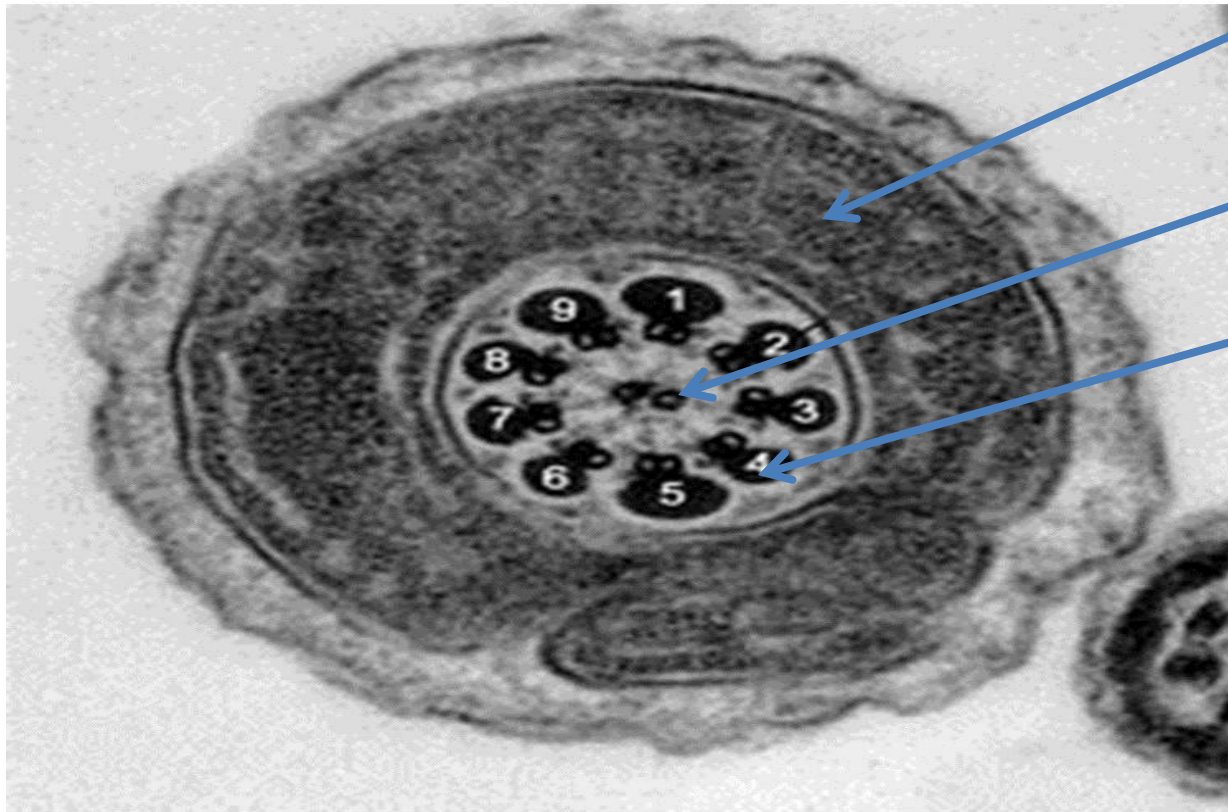
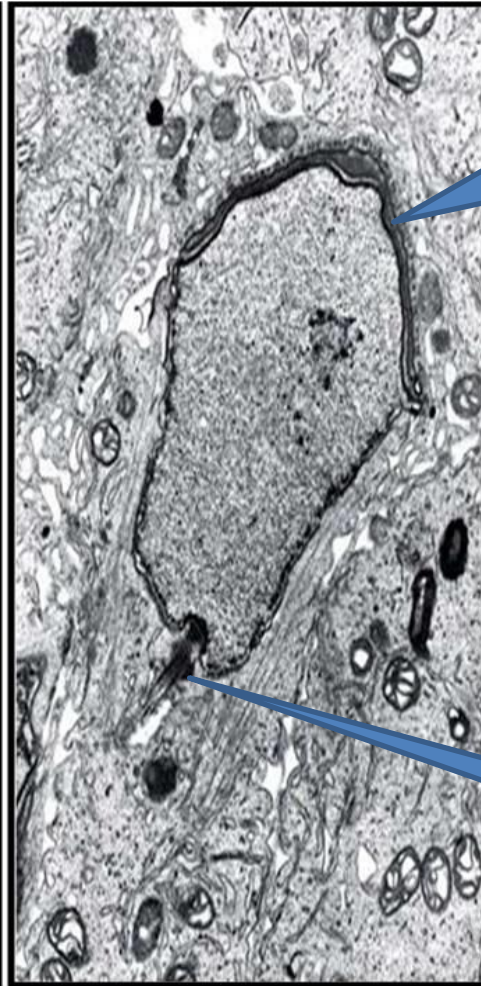
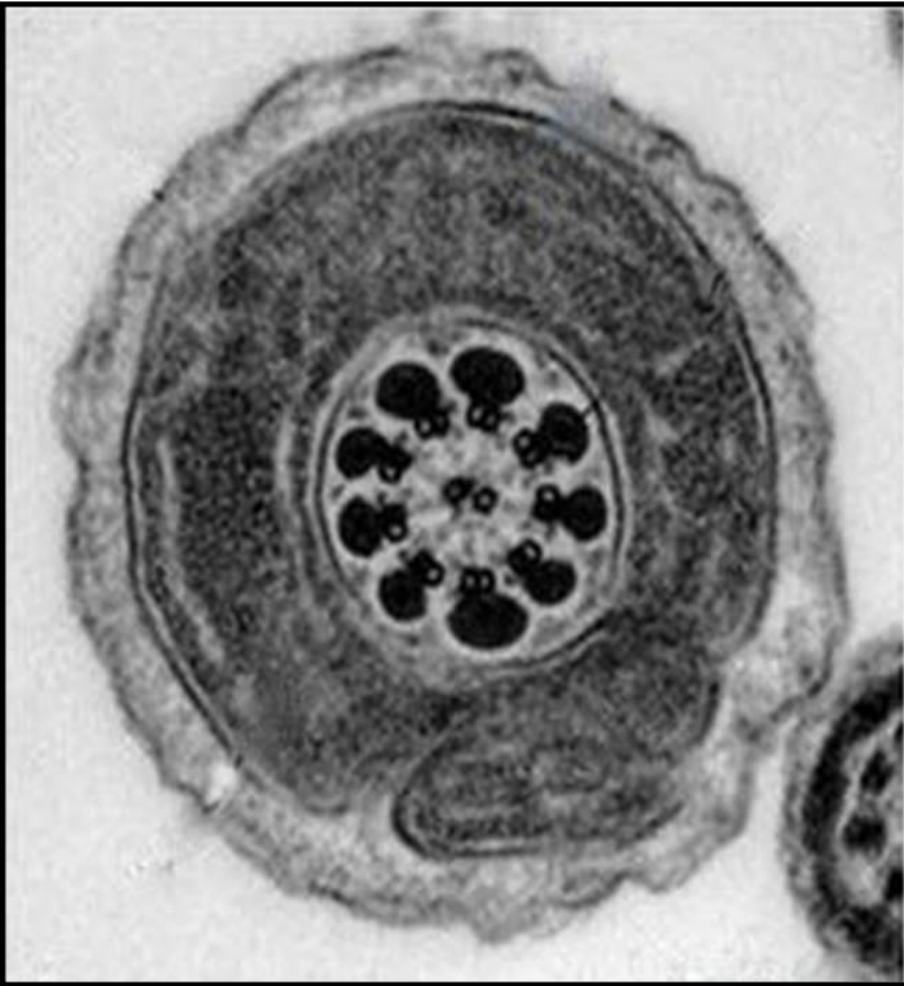
Blood renal barrier ("TEM")

Blood renal barrier ("TEM")

Glomerular capillaries and mesangial cell in between

Podocytes ("SEM")

- G : glomerulus
- P : PCT
- D: DCT
- C : capillary
- Arrow urinary pole of renal corpuscle

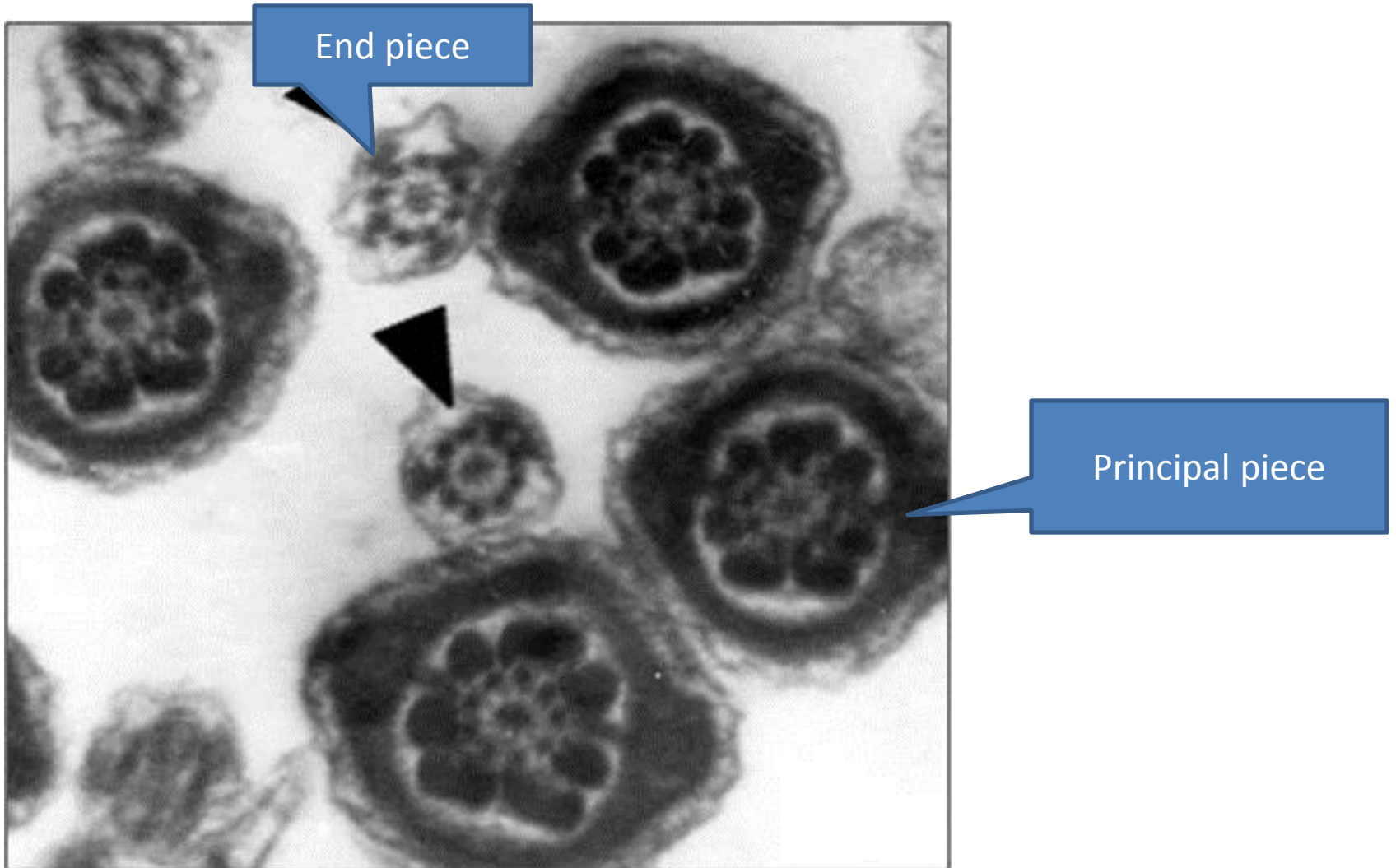
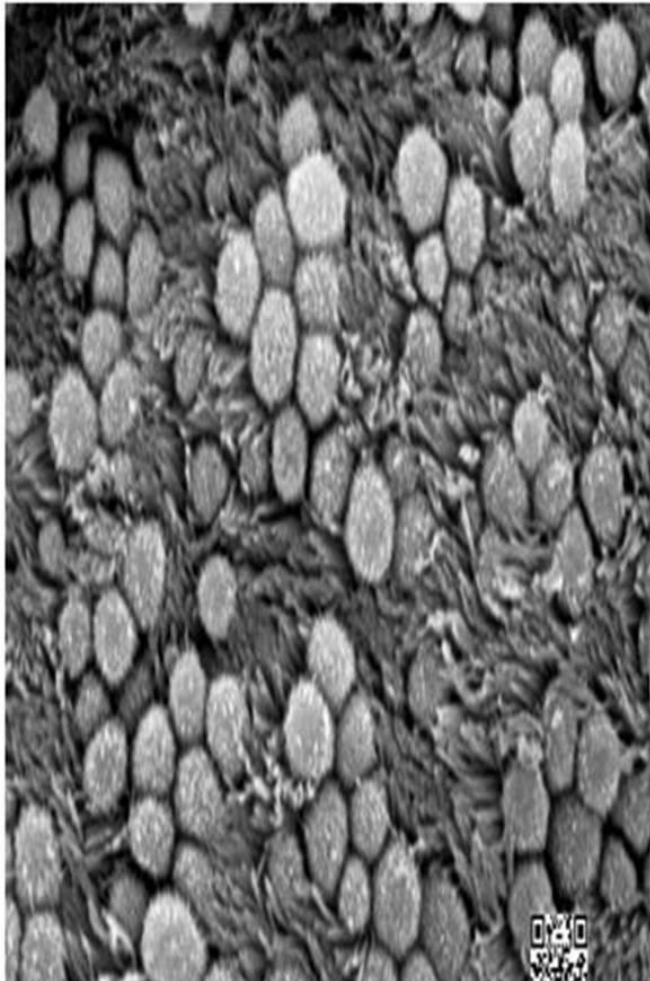
SEM glomerular capillary

Proximal convoluted tubules ("TEM")

Proximal convoluted tubules

Proximal convoluted tubules ("TEM")

Distal convoluted tubules ("TEM")

Tight junction

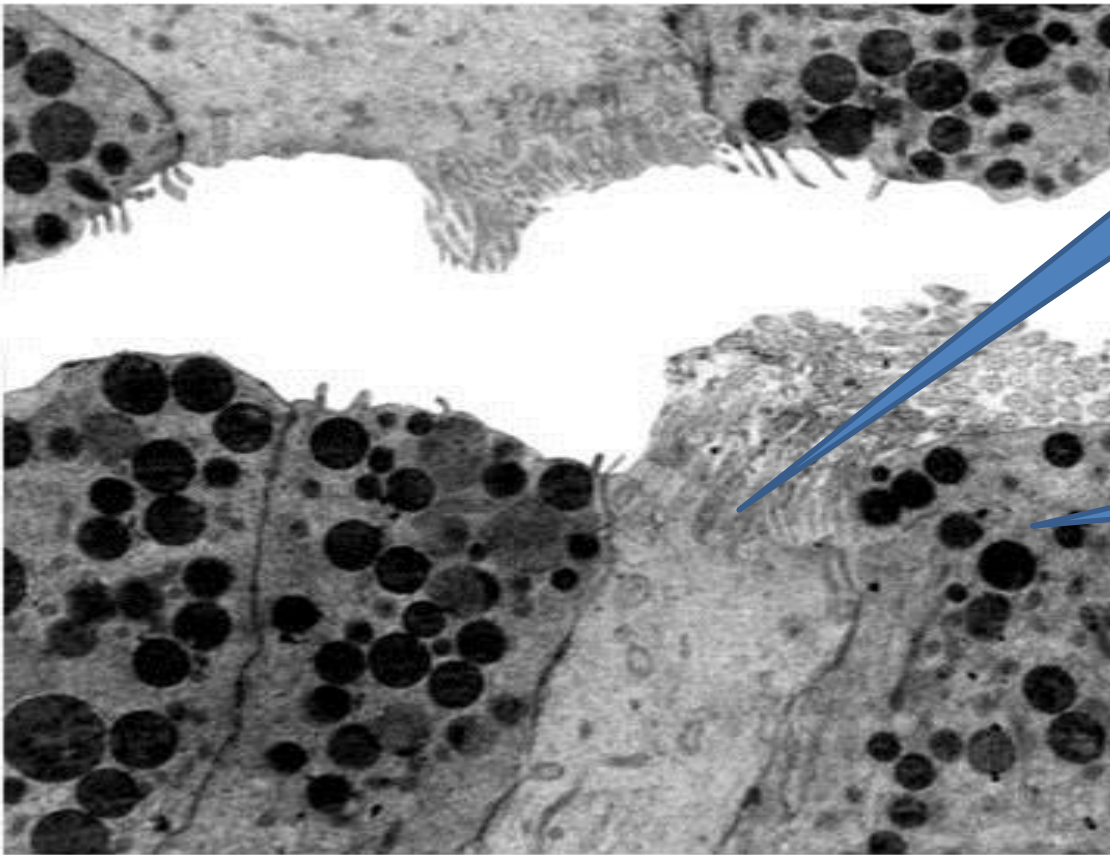
Few microvilli at apical surface.

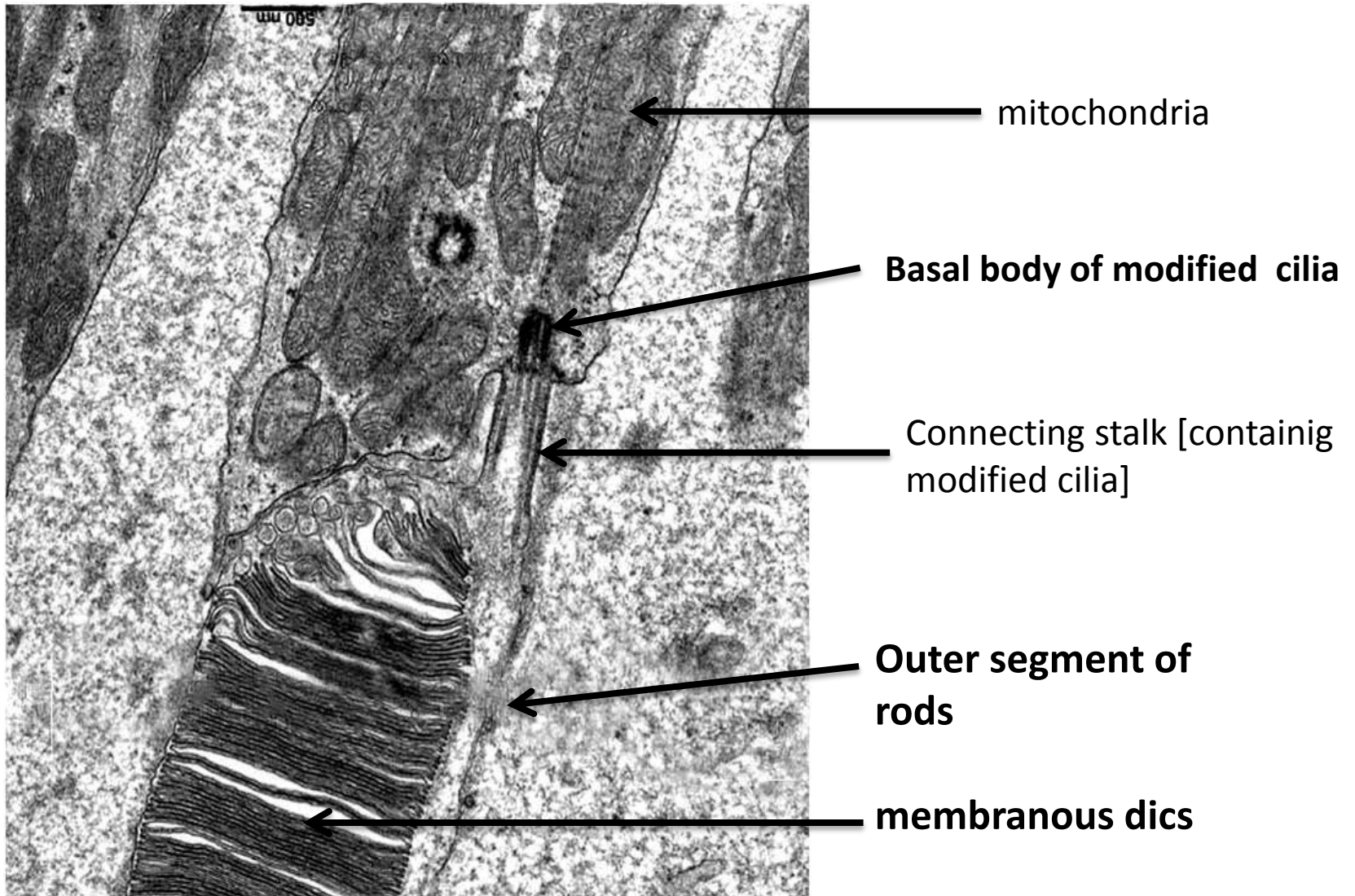
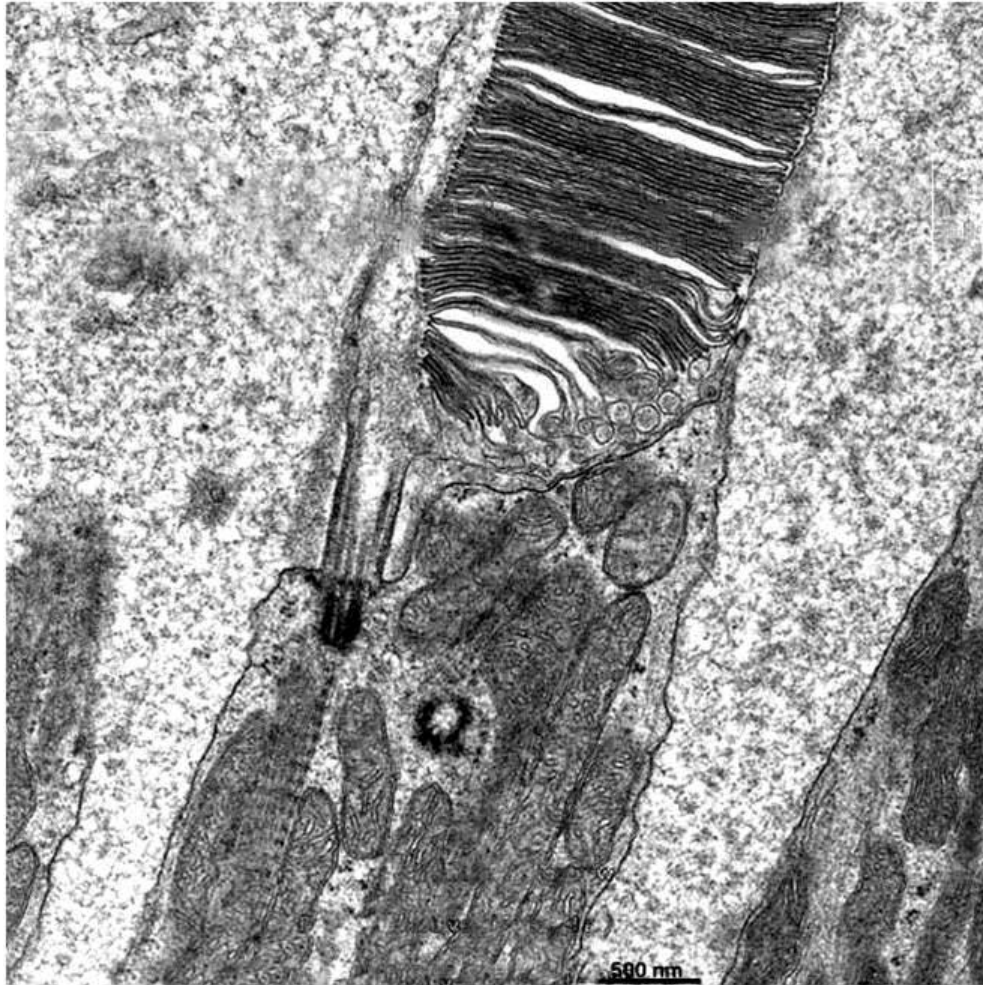
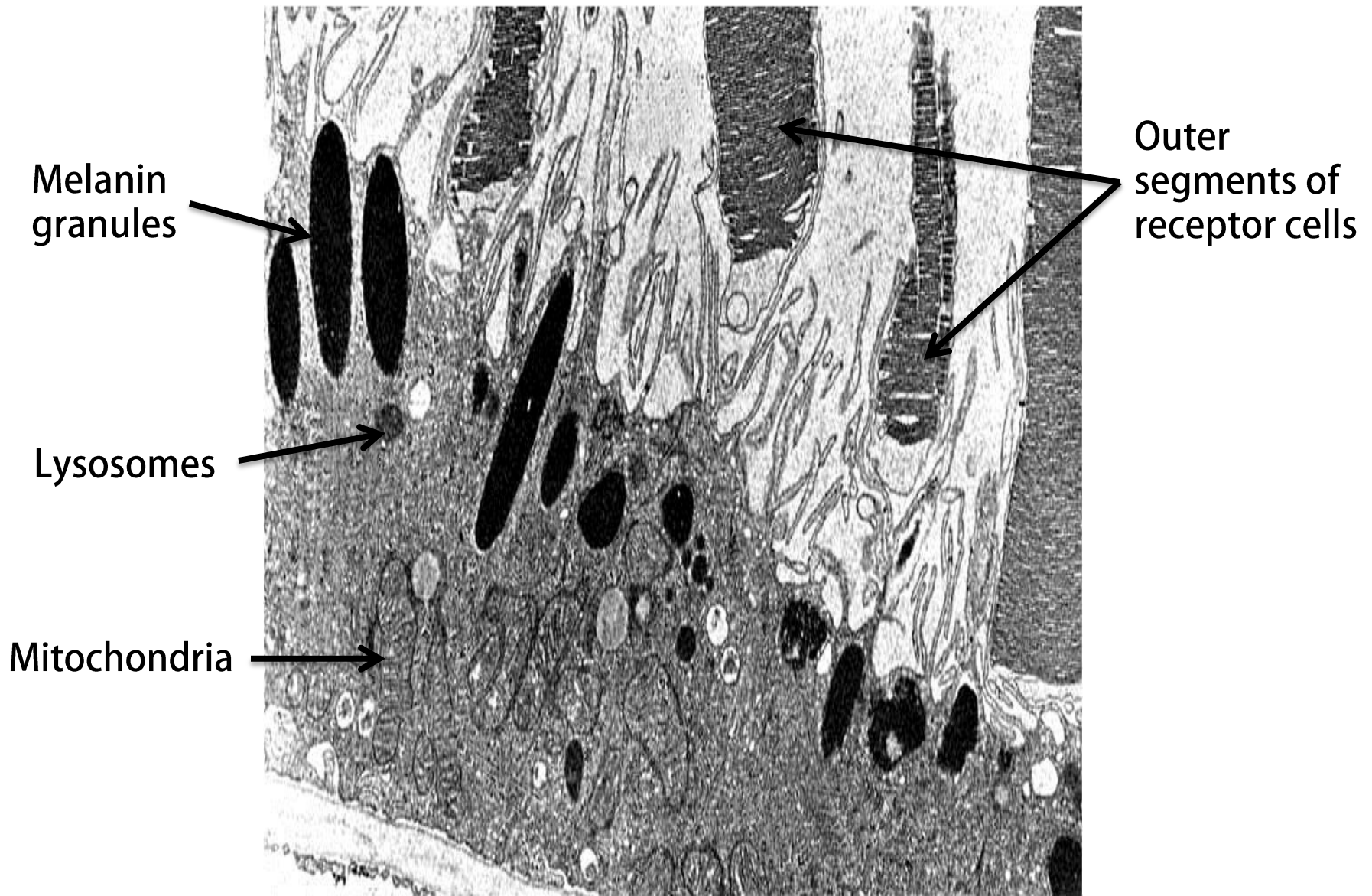
Basal infoldings forming compartments of cell membrane with elongated large mitochondria lying in them are more highly developed than PCT.

DCT

Sertoli cell in seminephrous tubule

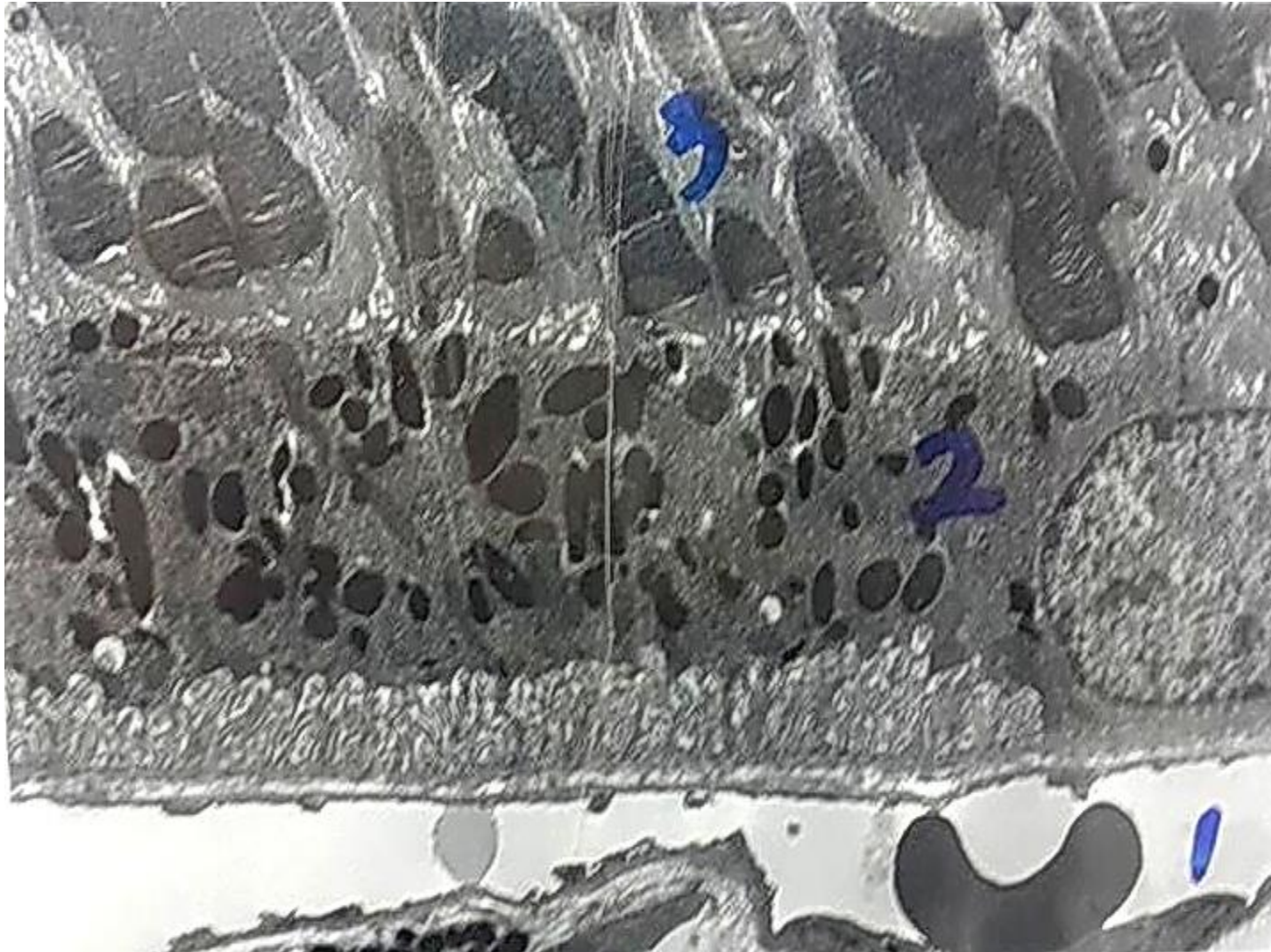
Mature Sperm

Sperm (middle piece)
Longitudinal section (L.S.)

Sperm (middle piece) Transverse section (T.S.)

Acrosomal cap
Basal body of tail

Tails of sperms

Epithelial lining of fallopian tube

Ciliated cells

secretory cells

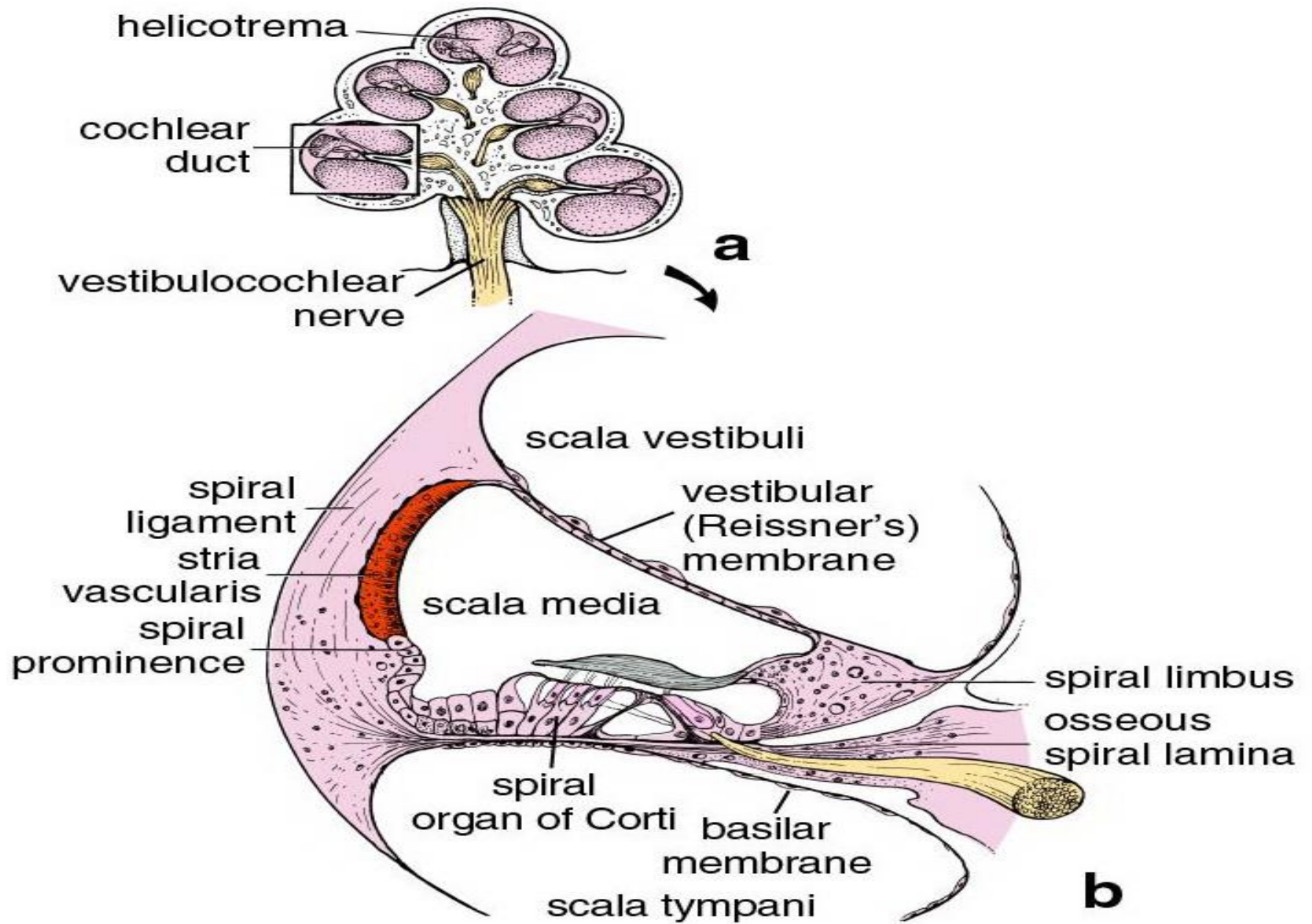
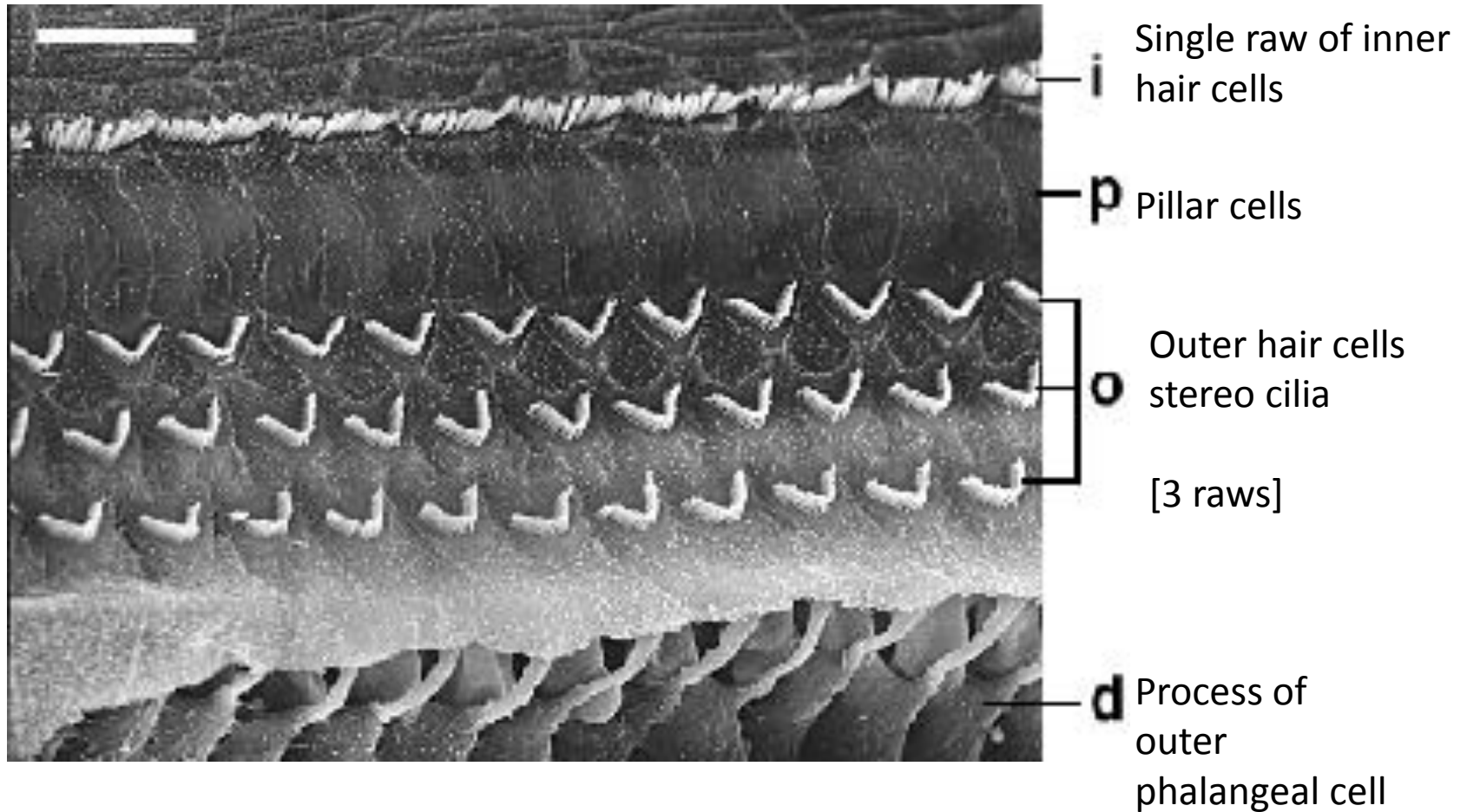
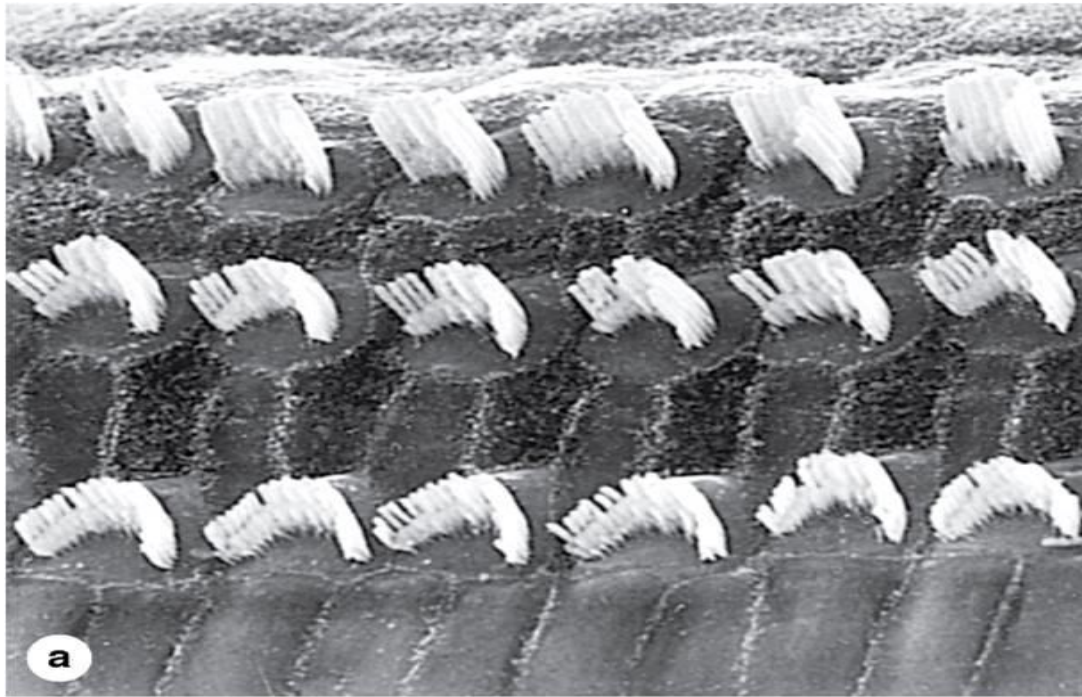
Fallopian tube

Outer segment of rod

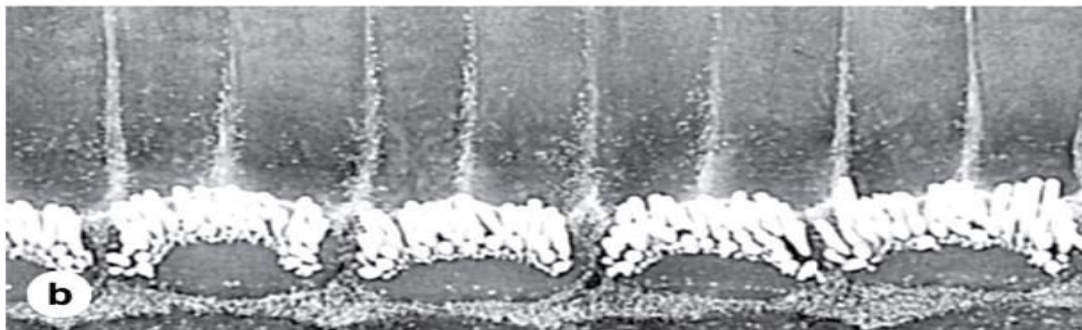
500 nm

Retinal pigmented epith.

Retina

1- choriocapillary

2- pigmented epith. Cells

3- outer segments of photoreceptor cells

helicotrema
cochlear duct
vestibulocochlear nerve
a
scala vestibuli
spiral ligament
vestibular (Reissner's) membrane
stria vascularis
scala media
spiral prominence
spiral limbus
osseous spiral lamina
spiral organ of Corti
basilar membrane
scala tympani
b

Organ of Corti shows hair cells with stereocillia (SEM)

Outer hair cells
stereo cilia

[3 raws]

stereo cilia
of inner hair cells